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Hamud, Fozia

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Fozia Hamud
Patent Examiner
Remsen 4D64
Mail Box: Remsen 4C70
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Art Unit 1647

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Interference:\_\_\_\_ SPDI!:\_\_\_\_

S/L:\_\_\_\_ Oligomer:\_\_\_\_

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Inventor:\_\_\_\_ Litigation:\_\_\_

Vendors and cost where applicable STN:
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QUESTEL/ORBIT:
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ALIGNMENTS

## REFERENCE AUTHORS TITLE JOURNAL RESULT 1 BD103586 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM ORIGIN FEATURES COMMENT source OS Homo PN JP 20 PD 25-DE PP 23-DE PP 23-DE PR 23-DE PI JOHN PC C12N110, C12N5/10, PC C12N5/10, Sims, J.E. SIGIRR DNA and polypeptide Patent: JP 2001526892-A 1 2 Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates; 1 (bases 1 to 1233) Homo sapiens (human) BD103586 1233 SIGIRR DNA and polypeptide. BD103586 BD103586.1 GI:22649160 IMMUNEX CORP JP 2001526892-A/1. C12P21/02,C12P21/08,C12Q1/37,G01N27/26,G01N27/447,C12N15/00, C12N5/00, G01N27/26 Homo sapiens (human) JP 2001526892-A/1 25-DEC-2001 23-DEC-1998 JP 2000525545 23-DEC-1997 US 60/068770 JOHN ERNEST SIMS C12N15/09,C07K14/715,C07K16/28,C12N1/15,C12N1/19,C12N1/21, SIGIRR DNA and polypeptide /organism='Homo sapiens (human)'. /organism="Homo sapiens" /mol\_type="genomic DNA" /db\_xref="taxon:9606" Location/Qualifiers 1. .1233 25-DEC-2001; ďď Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo. DB 6; r 3.4e-182; 0; DNA linear PAT 27-AUG-2002

Query Match 100
Best Local Similarity 100
Matches 1233; Conservative

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Klausner, R.D., Colline, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkine, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Yahey, J., Helton, E., Kettenan, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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Steven Jones, Jennifer Asano, Ian Bosdet, Yaron Butterfield, Susanna Chan, Readman Chiu, Chris Fjell, Erin Garland, Ran Guin, Letticia Hasiao, Martin Krzywinski, Reta Kutsche, Oliver Lee, Soo sen Lee, Victor Ling, Carrie Mathewson, Candice McLeavy, Steven Ness, Pawan Pandoh, Anna-Liisa Prabhu, Parvansh Saeedi, Jacqueline Schein, Duane Smailus, Michael Smith, Lorraine Spence, Jeff Stott, Michael Thorne, Miranada Tsai, Natasja van den Bosch, Jill Vardy, George Yang, Scott Zuyderduyn, Marco Marra.
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium
DNA Sequencing by: Genome Sequence Centre,
DC Cancer Agency, Vancouver, BC, Canada
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Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (18-MAR-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Direct Submission
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                                                                                                                                                                                                                                                       info@bcgsc.bc.ca
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This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 11141876.
     CAGAACATCAGCTTCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCT
                                                                                                                                                                                                          CACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTGTCC
                                                                                                                                                                                                                                                                                  CACTGCTCCCTGCCTTCAGTCCAGTGGCTGAAAGACGGGCTTCCATTGGGAATTGGGGGC
                                                                                                                                                                                                                                                                                                                                                        AGGCCTGCCTTGGGCAGCTCAGTGGCTCTGAACTGCACGGCTTGGGTAGTCTCTGGGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                              ATGCCAGGTGTCTGTGATAGGGCCCCTGACTTCCTCCCCGTCTGAAGACCCAGGTGCTG
                                                                CAGAACATCAGCTTCTCCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCT
                                                                                                             AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATC
                                                                                                                                                 AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATC
                                                                                                                                                                                         CACTACAGCCI
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/db xref="MIN:605478"
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/db xref="MIN:605478"
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ISFSSFTLQRAGFTSHVANLASLLVLLAALLYVECRLNVLLWYQDAYGEVEIN
DSKLYDAYVSYSDCPEDRKFVNFILKPLLERRGYKLFLDDRDLLPRAEPSADLLVNL
SRCRRLIVVLSDAFLSRAWCSHSFREGLCRLLELTRRFIFITFSGQRRDDAHPALRLL
RQHHHLVTLLLWRPGSVTPSSDFWKEVQLALERKVRYRPVEGDPQTQLQDDKDFWLIL
RGRVPEGRALDSEVDDPEGDLGVRGPVFGEPSAPPHTSGVSLGESRSSEVDVSDLGS
RNYSARTDFYCLVSKDDM"
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/db_xref="MIM:6
/db_xref="MIM:6
186. .1418
/gene="SIGIRR"
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /gene="SIGIRR"
/note="TIR; Region: TIR domain. The TIR domain is an intracellular signaling domain found in MyD88, interleukin 1 receptor and the Toll receptor. Called TIR (by SMART?) for Toll - Interleukin - Resistance"
/db_xref="CDD:pfam01582"
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/mol_type="mRNA"
/db_xref="taxon:9606"
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/tlssue_type="Lung, small cell cc/clone_lib="WIH MGC 7"
/ab_host="DH10B-R"-
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_xref="MIM:605478"
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Pred. No. 3.2e-182;
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Mammalia; Eutheria;
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Homo sapiens single Ig IL-IR-related mol
MGC:4338 IMAGE:2821373), complete cds.
BC003591
BC003591.1 GI:13097794
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                    Chordata;
Primates;
                      Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Alramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
Naramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
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Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, B.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and mouse cDNA semences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLML at: http://image.llnl.gov Series: IRAL Plate: 9 Row: n Column: 5 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 11141876.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
cDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Cor
DNA Sequencing by: Genome Sequence Centre,
BC Cancer Agency, Vancouver, BC, Canada
info@bcgsc.bc.ca
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Direct Submission

Office, National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Steve Jones, Sarah Barber, Mabel Brown-John, Yaron Butterfield, Andy Chan, Steve S. Chand, William Chow, Alison Cloutier, Ruth Andy Chan, Steve S. Chand, William Chow, Alison Cloutier, Ruth Featherstone, Malachi Griffith, Obi Griffith, Ran Guin, Nancy Liao, Kim MacDonald, Amara Masson, Mike R. Mayo, Josh Moran, Ryan Morin, Teika Olson, Diana Palmquist, Anca Petrescu, Anna Liisa Prahbu, Parvaneh Saseedi, JR Santos, Angelique Schnerch, Ursula Skalska, Parvaneh Saseedi, JR Santos, Angelique Schnerch, Ursula Skalska, Duane Smailus, Jeff Stott, Miranda Tsai, George Yang, Jacquie
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NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
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Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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900

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TITLE
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ORGANISM
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                                                                                                                                                                 NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology; cDNA library construction, 5'- & 3'-end one pass sequencing: Departent of Virology and Human Genome Center, Institute of Medical Science, University of Tokyo (partly supported by Science and Technology Agency).
                                                                                                                                                                                                                                                                                                                                                              Ota.T., Suzuki,Y., Obayashi,M., Nishi,T., Nakamura,Y., Isogai,T. and Sugano,S. NEDO human cDNA sequencing project Unpublished
                                                                                                                                                                                                                                                         Submitted (22-APR-2004) Sumio Sugano, Institute of Medical Scientification of Tokyo, Laboratory of Genome Structure, Human Gencenter; Shirokane-dai, 4-6-1, Minato-ku, Tokyo 108-8639, Japan (B-mail:flcdha@mail.ims.u-tokyo.ac.jp, Tel:81-3-5449-5286, Fax:81-3-5449-5286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AK172830
AK172830.1 GI:47077852
oligo capping; fis (full insert
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Sugano, S. and Suzuki, Y.
                                                                                                                                                                                                                                                                                                                                Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AK172830 1657 bp mRNA linear PRI 07-MAY-2004 Homo sapiens cDNA FLJ23991 fis, clone HRC08504, highly similar to Homo sapiens single Ig IL-1R-related molecule (SIGIRR).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGAGCAGCGAAGTGGACGTCTCGGATCTCGGCTCGCGAAACTACAGTGCCCGCACAGAC
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i,T., Shibahara,T., Tanaka,T.,
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TTCGAGGGCCAGAGGCGCGACCCCGCGCACCCGGCGCTCCGCCTGCTGCTGCCAGCACCGC AGCTTCCGGGAGGGCCTGTGCCGGCTGGTGGAGCTCACCCCGCAGACCCATCTTCATCACC TGCCGACGCCTCATCGTGGTGCTTTCCGGACGCCTTCCTGAGCCGGGCCTGGTGCAGCCAC GACCGCGACCTCCTGCCGCGCGCTGAGCCCTCCGCCGACCTCTTGGTGAACCTGAGCCGC GACCGCGACCTCCTGCCGCGCGCGCTGAGCCCTCCGCCGACCTCTTGGTGAACCTGAGCCGC GACGGGAAGCTCTACGACGCCTACGTCTCCTACAGCGACTGCCCCGAGGACCGCAAGTTC AAGTGCCGTCTCAACGTGCTGCTCTGGTACCAGGACGCGTATGGGGAGGTGGAGATAAAC CACCIGGIGACCITGCIGCICTGGAGGCCCCGGCTCCGIGACICCTTCCTCCGAITTTIGG GTGAACTTCATCCTAAAGCCGCAGCTGGAGCGGCGTCGGGGCTACAAGCTCTTCCTGGAC GTGAACTTCATCCTAAAGCCGCAGCTGGAGCGGCGTCGGGGCTACAAGCTCTTCCTGGAC AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATC CACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTCC CACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTCC CACTGCTCCCTGCCTTCAGTCCAGTGGCTGAAAGACGGGCTTCCATTGGGAATTGGGGGC TTCGAGGGCCAGAGGCGCGACCCCGCGCACCCGGCGCTCCGCCTGCTGCGCCAGCACCGC AGCTTCCGGGAGGGCCTGTGCCGGCTGCTGGAGCTCACCCGCAGACCCATCTTCATCACC TGCCGACGCCTCATCGTGGTGCTTTCCGGACGCCTTCCTGAGCCGGGCCTGGTGCAGCCAC CACTGCTCCCTGCCTTCAGTCCAGTGGCTGAAAGACGGGCTTCCATTGGGAATTGGGGGC ATGCCAGGTGTCTGTGATAGGGCCCCTGACTTCCTCTCCCCGTCTGAAGACCAGGTGCTG AAGTGCCGTCTCAACGTGCTGCTCTGGTACCAGGACGCGTATGGGGAGGTGGAGATAAAC AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCCTTCACCTGCCTCCATC AGGCCTGCCTTGGGCAGCTCAGTGGCTCTGAACTGCACGGCTTGGGTAGTCTCTGGGCCC ATGCCAGGTGTCTGATAGGGCCCCTGACTTCCTCTCCCCGTCTGAAGACCAGGTGCTG Conservative 100.0%; Score 1233; DB 9; Pred. No. 3.1e-182; Mismatches ç Length <u>,</u> 1006 1066 840 900 480 946 886 660 826 600 766 540 706 646 420 586 360 526 300 466 240 406 180 346 120 286 60 0

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                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (29-AUG-2000) Sumio Sugano, Institute of Medical Science, University of Tokyo, Laboratory of Genome Structure Analysis, Human Genome Center; Shirokane-dai, 4-6-1, Minato-ku, Tokyo 108-8639, Japan (E-mail:flodna@ims.u-tokyo.ac.jp, Tel:81-3-5449-5286, Fax:81-3-5449-5416)
                                                                                                                                                                                                                                                                                                               NEDO human cDNA sequencing project supported by Ministry of International Trade and Industry of Japan, cDNA full insert sequencing: Research Association for Biotechnology; cDNA library construction, 5'- & 3'-end one pass sequencing: Departent of Virology and Human Genome Center, Institute of Medical Science, University of Tokyo (partly supported by Science and Technology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 (bases 1 to 1695)
Sugano, S., Suzuki, Y., Ota, T., Obayashi, M., Nishi, T., Isogai, T., Shibahara, T., Tanaka, T. and Nakamura, Y.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kawabata,A., Hikiji,T., Kobatake,N., Inagaki,H., Ikema,Y., Okamoto,S., Okitani,R., Ota,T., Suzuki,Y., Obayashi,M., Nishi,T., Shibahara,T., Tanaka,T., Nakamura,Y., Isogai,T. and Sugano,S., NEDO, human, CDNA sequencing project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AK025099.1 GI:10437546 oligo capping; fis (full insert sequence).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
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227. .1459
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA linear clone COL04458.
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SRCRRLIVVLSDAFLSRAWCSHSFREGLCRLLELTRRPIFITFEGQRRDPAHPALRLL
RQHRHLVTLLLMRPGSVTPSSDFWKEVQLALPRKVRYRPVEGDPQTQLQDDKDPMLIL RNYSARTDFYCLVSKDDM" RGRVPEGRALDSEVDPDPEGDLGVRGPVFGEPSAPPHTSGVSLGESRSSEVDVSDLGS

| CCGTGACTCCTTCCGATTTTTGG 900                          | CACCTGGTGACCTTGCTGCTCGAAGGCCCGGCTCCGTGACTCCTTCCT            | 841   | 3 8     |
|--|---|---|---------|
| CGCTCCGCCTGCTGCGCCAGCACCGC 1066                      | TTCGAGGGCCAGAGGCGCACCCGGCGCTCCGCCTGCTGCCAGCACCGC            | 1007  | 벍       |
| CGCTCCGCCTGCTGCGCCAGCACCGC 840                       | TTCGAGGGCCAGAGGCGCGACCCGGCGCACCCGGCGCTC                     | 781   | Ş       |
| TCACCCGCAGACCCATCTTCATCACC 1006                      | AGCTTCCGGGAGGGCCTGTGCCGGCTGCTGGAGCTCACCCGCAGACCCATCTTCAT    | 947   | 뮹       |
| TCACCCGCAGACCCATCTTCATCACC 780                       | AGCTTCCGGGAGGGCCTGTGCCGGCTGCTGGAGCTCACC                     | 721   | Ş       |
| CCTGGTGCAGC  | TGCCGACGCCTCATCGTGGTGCTTTCGGACGCCTTCCTGAGCCGGG              | 887   | 뭥       |
| CCTGGTG  | TGCCGACGCCTCATCGTGGTGCTTTCGGACGCCTTCCTG                     | 661   | Ş       |
| CCGACCTCTTGGTGAACCTGAGCCGC 886                       | GACCGCGACCTCCTGCCGCCGCCTGAGCCCTCCGCCGACCTCTTGGTGAACCTGAGCCG | 827   | 뭥       |
| CCGACCTCTTGGTGAACCTGAGCCGC 660                       | -2  | 601   | Ş       |
| GTCGGGGCTACAAGCTCTTCCTGGAC 826                       | GTGAACTTCATCCTAAAGCCGCAGCTGGAGCGGCGTCGG                     | 767   | 뮍       |
| GTCGGGGCTACAAGCTCTTCCTGGAC 600                       | GTGAACTTCATCCTAAAGCCGCAGCTGGAGCGGCGTCGGGGCTACAAGCTCTTCCTGGA | 541   | Ş       |
| GCGACTGCCCCGAGGACCGCAAGTTC 766                       | GACGGGAAGCTCTACGACGCCTACGTCTCCTACAGCGACTGCCCCGAGGACCGC      | 707   | 문       |
| GCGACTGCCCCGAGGACCGCAAGTTC 540                       | GACGGGAAGCTCTACGACGCCTACGTCTCCTACAGCGAC                     | 481   | Ş       |
| ACGCGTATGGGGAGGTGGAGATAAAC 706                       | AGTGCCGTCTCAACGTGCTGCTCTGGTACCAGGACGCGTATGGGGAGGTGGAGATAAAC | 647   | 뭥       |
| ACGCGTATGGGGAGGTGGAGATAAAC 480                       | AAGTGCCGTCTCAACGTGCTGCTCTGGTACCAGGACGCC                     | 421   | Ş       |
| TGCTGCTGGCCGCCCTGCTCTATGTC 646                       | GCGGTGCTCCCTCCTGGTCCTGCTGCTGCTGCTGCTGCTG                    | 587   | DЬ      |
| TGCTGCTGGCCGCCCTGCTCTATGTC 420                       | GCGGTGCTGGCCTCCTCGTGGTCCTGCTGCCTGCTG                        | 361   | Ş       |
| GAGCTGGCCCTACAAGCCACGTGGCT 586                       | CAGAACATCAGCTTCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCT   | 527   | 뮹       |
| GAGCTGGCCCTACAAGCCACGTGGCT 360                       | CAGAACATCAGCTTCTCCTTCACTCTTCAGAGAGCT                        | 301   | Š       |
| TCTATGGGGCCTTCACCTGCTCCATC 526                       | AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTC    | 467   | 뮹       |
| TCTATGGGGCCTTCACCTGCTCCATC 300                       | AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTAT                     | 241   | Ş       |
| CTGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTCC 466            | CACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAAC                     | 407   | 뭥       |
| CCAACCTGTCAGAGGTGCTTGTGTCC 240                       | CACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAAC                     | 181   | Ş       |
| ACGGGCTTCCATTGGGAATTGGGGGC 406                       | CACTGCTCCCTGCCTTCAGTCCAGTGGCTGAAAGACGGG                     | 347   | В       |
| ACGGGCTTCCATTGGGAATTGGGGGC 180                       | CACTGCTCCCTGCCTTCAGTCCAGTGGCTGAAAGACGGGCTTCCATTGGGAATTGGGGG | 121   | ફ       |
| 유=   | AGGCCTGCCTTGGGCAGCTCCAGTGGCTCTGAACTGCACGGCTTGGGTAGTCTCTGGG  | 287   | DЬ      |
| GCACGGCTTGGGTAGTCTCTGGGCCC 120                       | AGGCCTGCCTTGGGCAGCTCAGTGGCTCTGAACTGCACG                     | 61  | δ       |
| CCCTGACTTCCTCTCCCCGTCTGAAGACCAGGTGCTG 286            | ATGCCAGGTGTCTGTGATAGGGCCCCTGACTTCCTCTCC                     | 227   | 망       |
| TCTCCCCGTCTGAAGACCAGGTGCTG 60                        | ATGCCAGGTGTCTGTGATAGGGCCCCTGACTTCCTCTCC                     | <b>1</b>                                    | Ş       |
| DB 9; Length 1695;<br>e-182;<br>0; Indels 0; Gaps 0; | 0   | Query Match<br>Best Local S<br>Matches 1233 | 3 to 10 |
|  |   |   |         |

| Query Match  99.9%; Score 1231.4; DB 6; Length 1659;  Best Local Similarity 99.9%; Pred. No. 5.6e-182;  Matches 1232; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  Oy 1 ATGCCAGGTGTCTGTGATAGGGCCCCTGACTTCCTCTCCCCGTCTGAAGACCAGGTGCTG 60 | /codon_start=1 /proteIn_id="CAC22520.1" /proteIn_id="CAC22520.1" /db_xref=""GI:12310953" /translation="MeGVCDRAPDELSPSEDQVLRPALGSSVALNCTAWVVSGEHCSL /translation="MeGVCDRAPDELSPSVLAVSVLGVNVTSTEVVGAFTCSION PSVQMIKDGLELGIGGHYSLHEYSWVKANLSEVLVSSVLGVNVTSTEVVGAFTCSION ISFSSFTLGRAGPTSHYPAVLASLLLLYLLALLLAALLYVKCLALVLLWCDAYGEVEIN DGKLYDAYVSYSDCPEDRKFVMFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNL SRCRRLIVVLSDAFLSRAWCSHSFREGLCRILELTRRPIFITFGGQRRDPAHPALRLL RQHHHLVTLLLMRPGSVTPSSDFWKEVQLALPRXVRVRVEPGDPQTQLODKODMLIL RQHHHLVTLLLMRPGSVTPSSDFWKEVQLALPRXVRVRVBCGDPQTQLODKDDMLIL RGRVPEGRALDSEVDPDPEGDLGVRGPVFGEPSAPPHTSGVSLGESRSSEVDVSDLGS RNYSARTDFYCLVSKDDM" | Curagen  |  | RESULT 6 AX058610 AX058610 LOCUS AX058610 DEFINITION Sequence 17 from Patent WO0075321. ACCESSION AX058610 VERSION AX058610.1 GI:12310952 KEYWORDS . | Qy 1201 TTCTACTGCCTGGTGTCCAAGGATGATATGTAG 1233                           | Qy 1141 CGGAGCAGCGAAGTGGACGTCTCCGGATCTCCGGCTCGCGAAACTACAGTGCCCGCACAGAC 1200 | QY 1081 CCTGTTTTTGGAGAGCCATCAGCTCCACCGCACACCAGTGGGGTCTCGCTGGGAGAGAGC 1140 | Qy 1021 GGCCGGGCCCTGGACTCAGAGGTGGACCCGGACCCTGAGGGCGACCTGGGTGTCCGGGGG 1080 | Qy       961       CAGACGCAGCTGCAGGACCAAGGACCCCATGCTGATTCTTCGAGGCCGAGTCCCTGAG       1020 | Qy       901       AAAGAAGTGCAGCTGGCGCTGCCGCGGAAGGTGCGGTACAGGCCGGTGGAAGGACCCC       960 |
|---|---|--|--|--|--|---|---|---|--|---|
| D Q D Q D Q   | B & B & B &   | D Q D Q  | Qy Qy  | D  | B 8  | ₽ <i>Q</i>  | D Q   | B &   | B 8  | B &   |
| 1021 GGCCGGGCCCTGGAACTCAGAAGGTGGACCCGGACCCTGAGGGCGACCTGGGTGTCCGGGGG 1080  | 841 CACCTGGTGACCTTGCTGCTGCAGGCCCGGCTCCGTGACTCCTTCCT   | 721 AGCTTCCGGGAGGGCCTGTGCCGGCTGCTGGAGCTCACCCGCAGACCCATCTTCATCACC 780 | 601 GACCGCGACCTCCTGCCGGCGCTGAGCCCTCCGGCCGACCTCTTGGTGAACCTGAGCCGC 660 | 481 GACGGAAGCTCTACGACGCCTACGTCTCCTACAGCGACTGCCCCGAGGACCGCAAGTTC 540  | 421 AAGTGCCGTCTCAACGTGCTGCTCTGGTACCAGGACGCGTATGGGGAGGTGGAGATAAAC 480<br> | 361 GCGGTGCTGGCCTCCTCCTGGTCCTGCTGGCCGCTGCTGGCCCCTGCTCTATGTC 420             | 301 CAGAACATCAGCTTCTCCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCT 360      | 241 AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATC 300      | 181 CACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTCC 240                     | 121 CACTGCTCCCTGCCTTCAGTCCAGTGGCTGAAAGACGGGCTTCCATTGGGAATTGGGGGC 180<br>                |

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REFERENCE
AUTHORS
TITLE
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                                                                                                 gene
                                                                     CDS
                                                                                                                                                                                                                                      Bource
                                                                                                                                                                                                                                                                                                                                                              RZPD Deutschee Ressourcenzentrum fuer Genomforschung GmbH,
Heubnerweg 6, D-14059 Berlin, Germany
Tel: +49 30 32639 100
Fax: +49 30 32639 111
www.rzpd.de
This clone is available from RZPD;
Contact RZPD (customer.service@rzpd.de) for further information.
This CDS clone is a part of a collection of human full length
expression clones generated by RZPD.
This CDS has been cloned incl. stopcodon.
The CDS has been inserted into pDONR201 via a BP Clonase (TM)
reaction. Additional sequence has been added in front of the start
codon: att. AAAAAA GCA GCG (ATG).
The last base of the last coding triplett has been changed to T,
which might lead to an amino acid change at the C terminus of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1444
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                                                                                                                                                                                                                                         polypeptide.

The stop codon has been set to TAA followed by
TTAACCCAGCTTTCTT. .att. Compared to the reference sequence NM_021805
we found amino acid exchange(s) at position (first base of changed
triplet): 1228(met->ile)
Clone distribution: http://www.rzpd.de/products/orfclones/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Direct Submission
Submitted (03-JUN-2004) RZPD Deutsches Ressourcenzentrum fuer
Submitted (03-JUN-2004) RZPD Deutsches Ressourcenzentrum fuer
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www.rzpd.de/cgi-bin/products/cl.cgi?CloneID=RZPD0834H0613D RZPDLIB;
Human Full ORF Clones Gateway(TM) - RZPD (kan-resist.) RZPD LIB NO.
834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ebert,L., Schick,M., Neubert,P., Schatten,R., Henze,S. and Korn,B. Cloning of human full open reading frames in Gateway(TM) system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           www.rzpd.de/products/orfclones/
Contact: Inge Arlart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         www.rzpd.de/cgi-bin/products/showLib.pl.cgi/response?libNo=834
www.rzpd.de/products/orfclones/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry vector (pDONR201)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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gene SIGIRR,
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/gene="SIGIRR"
/codon_start=1
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/clone_lib="Human Full ORF Clones Gateway(TM) -
/lab_host="DH10B"
                                                                                                                                                                                                   organism="Homo sapiens"
|mol_type="mRNA"
                                                                                 gene="SIGIRR"
                                                                                                                                                                                     /db_xref="taxon:9606"
                                                                                                                   note="Vector:
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single Ig
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SRCRRLIVVLSDAFLSRAWCSHSFREGLCRLLEITRR9IFITEGQRRDPAHPALRLL
RQHRHLVTLLLMRPGSVTPSSDFWKEVQLALPRKVRYRPVEGDPQTQLQDDKDPMLIL RGRYPEGRALDSEVDÉDPEGDLGVRGPVFGEPSAPPHTSGVSLGESRSSEVDVSDLGS RNYSARTDFYCLVSKDDI"

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CACTGCTCCCTGCCTTCAGTCCAGTGGCTGAAAGACGGGCTTCCATTGGGAATTGGGGGC
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TTCGAGGGCCAGAGGCGCGACCCCGCCTCCGCCTGCTGCTGCCAGCACCGC
                                                                                                                                                                AGCTTCCGGGAGGGCCTGTGCCGGCTGGAGCCCGCAGACCCATCTTCATCACC
                                                                                                                                                                                                                      TGCCGACGCCTCATCGTGGTGCTTTCGGACGCCTTCCTGAGCCGGGCCTGGTGCAGCCAC
                                                                                                                                                                                                                                                 TGCCGACGCCTCATCGTGCTGCTTTCGGACGCCTTCCTGAGCCCGGGCCTGGTGCAGCCAC
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Pred. No. 8.6e
0; Mismatches
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No. 8.6e-182;
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Homo sapiens
Eukaryota; Metazoa; C
Mammalia; Eutheria; P
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   AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATC
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/mol_type="unassigned DNA"
/db_xref="taxon:9606"
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Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1649)

Clark, H.F., Gurney, A.L., Abaya, E., Baker, K., Baldwin, D., Brush, J., Chen, J., Chow, B., Chui, C., Crowley, C., Currell, B., Deuel, B., Dowd, P., Eaton, D., Poster, J., Grimaldi, C., Gu, Q., Hass, P.E., Heldens, S., Huang, A., Kim, H.S., Klimowski, L., Jin, Y., Johnson, S., Lee, J., Lewis, L., Liao, D., Mark, M., Robbie, E., Sanchez, C., Schoenfeld, J., Seshagiri, S., Simmons, L., Singh, J., Smith, V.,
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Submitted (01-AUG-2003) Department of Bioinformatics,
Inc., 1 DNA Way, South San Francisco, CA 94080, USA
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AAGTGCCGTCTCAACGTGCTCTTGGTACCAGGACGCGTATGGGGAGGTGGAGATAAAC
                                                                             AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCCTTCACCTGCTCCATC
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Pred. No. 3.6
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| RESULT 10 BC010806 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS   | Qy Db  | P   | D Qy  | B & !   | B &   | g 49   | B &  | B &  | B 8  | Ф  |
|--|--|---|---|---|---|--|--|--|--|--|
| BC010806 BC010806 BC010806 MUS musculus expressed sequence AI256711, mRNA (cDNA clone MGC:18899 IMAGE:4240425), complete cds.  MUS musculus (house mouse) BC010806 BC010806.1 GI:14789848 BC010806.1 GI:147888 BC010806.1 GI:14789848 BC010806.1 GI:14789848 BC010806.1 GI:14789848 | 1064 CAGACGCAGCTGCAGGACGACAAGGACCCCATGCTGATTCTTCGAGGCCGAGTCCCTGAG 1123 1021 GGCCGGGCCCTGGACTCAGAGGTGGACCCGGACCCTGAGGGCGACCTGGGTGTCC 1075 | 901 AAAGAAGTGCAGCTGCCGCGCGCGGAAGGTGCGGTACAGGCCGGTGGAAGGACCCC 96 | 841 CACCTGGTGACCTTGCTGCTCTGGAGGCCCGGCTCCGTGACTCCTTCCT | 81 TTCGAGGGCCAGAGGCGCGACCCCGCGCACCCGGCGCTCCGCCTGCTGCGCCAGCACCGC 8 | 721 AGCTTCCGGGAGGGCCTGTGCCGGCTGGAGCTCACCCGCAGACCCATCTTCATCACC 780 | 661 TGCCGACGCCTCATCGTGGTGCTTTCGGACGCCTTCCTGAGCCGGGCCTGGTGCAGCCAC 720 | 601 GACCGCGACCTCCTGCCGCGCGCTGAGCCCTCCGCCGACCTCTTGGTGAACCTGAGCCGC 660 | 541 GTGAACTTCATCCTAAAGCCGCAGCTGGAGCGGCGTCGGGGCTACAAGCTCTTCCTGGAC 600 | 481 GACGGGAAGCTCTACGACGCCTACGTCTCCTACAGCGACTGCCCCGAGGACCGCAAGTTC 540 | 524 AAGTGCCGTCTCAACGTGCTGCTCTGGTACCAGGACGCGTATGGGGAGGTGGAGATAAAC 583 |

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Tissue Procurement: Jeffrey E. Green, M.D.
Tissue Procurement: Jeffrey E. Green, M.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human (
Center, Stanford University School of Medicine, Stanford, (
Center, Stanford University School of Medicine, Stanford, (
Web site:
Meb site:

Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 25 Row: p Column: 10
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 12746439.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dickson,
R. M.
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Submitted (12-JUL-2001) National Institutes of Health, Mammalian Sene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
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Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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   AGGCCTGCCTTGGGCAGCTCAGTGGCTCTGAACTGCACGGCTTGGGTAGTCTCTGGGCCC
                                       ATGCCAGGTGTCTGTGATAGGGCCCCTGACTTCCTCTCCCCCGTCTGAAGACCCAGGTGCTG
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                                                                                                               Conservative
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81.7%;
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Pred. No. 2.9e-124;
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SOURCE
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Best Local
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1 (Dases 1 to 1421)
Poltorak,A. and Beutler,B.
Molecular cloning of mouse S
Toll-like cytoplasmic domain
Unpublished
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Mus musculus single I

AF239957

AF239957.1 GI:727194
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (01-MAR-2000) Internal Medicine, UT Southwestern Medical Center/HHMI, 5323 Harry Hines Boulevard, Dallas, TX 75235-9050, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 (bases 1 to 1421)
Poltorak, A. and Beutler, B.
AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATC
                                                                 CACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCTACTGCCTGGTGTCCAAGGATGATATGTAG 1233
                                                                                                         CAGTGTCCCCAGCCATCAGTGCAGTGGCTGAAAGATGGTCTGGCATTGGGCAATGGAAGC
                                                                                                                                CACTGCTCCCTGCCTTCAGTCCAGTGGCTGAAAGACGGGCTTCCATTGGGAATTGGGGGC
                                                                                                                                                                  GGTCTTGCCCTTGGCAGAGAGTTGCTTTGAATTGCACAGCTTGGGTGTTCTCTAGGCCC
                                                                                                                                                                                        AGGCCTGCCTTGGGCAGCTCAGTGGCTCTGAACTGCACGGCTTGGGGTAGTCTCTGGGCCCC
                                                                                                                                                                                                                             ATGGCAGGTGTCTGTGACATGGCCCCTAATTTCCTTTTCCCCATCTGAAGACCAGGCCTTG
                                                                                                                                                                                                                                                         ATGCCAGGTGTCTGTGATAGGGCCCCTGACTTCCTCTCCCCGTCTGAAGACCAGGTGCTG
                                              CACTTCAGCCTCCATGAGGACTTCTGGGTCAGCGCCAACTTCTCAGA----GATTGTGTCC
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                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                        /translation="MAGYCDMAPNFLSDSEDQALGILALGREVALNCTAWVFSRDQCPQ
PSVQWLKDGLALGNGSHFSLHEDFWVSANFSEIVSSVLVLNLTNAEDYGTFTCSVMNV
SSHSFTLWRAGPAGHVAAVLASILVLVVLLLVALLYVCCRLNMLLMYQDTYGSVEMND
GKLYDAYVSYSDCPEDRKFVNFILKPQLERRGYKPFLDEKLINMLLPRAEPSADLLVNL
RCCRRLIVVLSDAFLSRPWCSQSFREGLCRLLELTRRPIFITFBGQRREPIHPALRILR
QHRHLVTLVLMKPGSVTPSSDFWKELQLALPRKVQYRPVEGDPQTRLQDDKDPMLIVR
GRAAQGRGMESELDPDPEGDLGVRGPVFGEPPTPLQETRICIGESHGSEMDVSDLGSR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /codon_start=1
/product="single Ig IL-1R-related protein"
/protein id="AAF44701.1"
/protein id="AAF44701.1"
/db_xref="GI:7271943"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /db xref="taxon:10000"
/cell_line="RAW 264.7"
109. 1338
                                                                                                                                                                                                                                                                                                                                                                NYSARTDFYCLVSEDDV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Mus musculus"
/mol_type="mRNA"
/strain="BALB/c"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="SIGIRR;
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Ig IL-1R-related
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                                                                                                                                                                                                                                                                                     Score 856.6; DB 10;
Pred. No. 1.1e-123;
0; Mismatches 225;
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                                                                                                                                                                                                                                                                                                                                                                                                                          TGTCGGCGTCTCATCGTGGTTCTTTCAGATGCCTTCCTAAGCCGGCCCTGGTGTAGCCAG
                              1540 bp mRNA
toll/interleukin-1 receptor 8
                                linear
(TIR8)
                                  mRNA,
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Garlanda, C., Riva, F., Polentarutti, N., Buracchi, C., Sironi, M. Bortoli, M., Muzio, M., Bergottini, R., Scanziani, B., Vecchi, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hirsch, B. and Mantovani, A.
Intestinal inflammation in mice deficient in Tir8,
member of the IL-1 receptor family
Proc. Natl. Acad. Sci. U.S.A. 101 (10), 3522-3526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus
Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (14-DEC-1998) Immunology, Mario Negri Institute,
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Penton-Rol,G., Polen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished
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Penton-Rol,G., Polentarutti,N., Muzio,M. and Mantovani,A.
TIRB: a novel toll/interleukin-1 receptor family member
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                     CAGTGTCCCCAGCCATCAGTGCAGTGGCTGAAAGATGGTCTGGCATTGGGCAATGGAAGC
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                             AGTGTCCTGGTGCTCAACTTGACCAATGCAGAGGACTATGGAACCTTCACCTGTTCTGTC
                                                                                               CACTTCAGCCTCCATGAGGACTTCTGGGTCAGCGCCCAACTTCTCAGA----GATTGTGTCC
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /product="tol1/interleukin-1 receptor 8"
/product="tol1/interleukin-1 receptor 8"
/product="tol1/interleukin-1 receptor 8"
/product="tol1/interleukin-1 receptor 8"
/product="tol1-interleukin-1 receptor 8"
/db_xref="gi-67-14888"
/translation="magycdmapnflspsedgalglalgrevalunctmaedygtprogvmnv
sshstilmagpaghtvaavlasilvVVLLLVLLLVRAEDygtprogvmnv
sshstilmagpaghtvaavlasilvVVLLLVLLLTREDEDLLFRADASADLLVNLS
GKLYDAYVSYSDCPEDRKFVNFILKPQLERRRGYKLFLEDRDLLFRADASADLLVNLS
GKLYDAYVSYSDCPEDRKFVNFILKPQLERRRGYKLFLEDRDLLFRADASADLLVNLS
GRANQGRGMESELDPDEBEDLGVREDCAAYMSSPADLSSSPLRARGVSPYTLLSGSCR
HDRHLVTLVLMKPGSVTPSSDFMKELQLALFRKVQYRFVEGDFGTRLQDDKDFMLIVR
GRAAQGRGMESELDPDEBEDLGVRGEVFGEPFTFLQETRICIGESHGSEMDVSDLGSR
NYSARTDFYCLVSEDDV"
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/note="putative transmembrane receptor of the Toll/IL-1
family; cytoplasmic domain similar to other IL-1R family
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115. .1344
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Pred. No. 6.1e-119;
D; Mismatches 230;
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AK093427
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oligo capping; fis (full insert sequence)
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Homo sapiens cDNA FLJ36108 fis, clone TEST: similar to Mus musculus toll/interleukin-1
                                                                                                                                                                                                    CTTCTACTGCCTGGTGTCCAAGGATGATATGTAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nishi,T., Ota,T., Nakagawa,S., Senoh,A., Mizuguchi,H., Inagaki,H., Sugiyama,T., Irie,R., Oteuki,T., Sato,H., Wakamateu,A., Ishii,S., Yamamoto,J., Isono,Y., Kawai-Hio,Y., Saito,K., Nishikawa,T., Kimura,K., Yamashita,H., Matsuo,K., Nakamura,Y., Sekine,M., Kikuchi,H., Kanda,K., Wagatsuma,M., Murakawa,K., Kanehori,K., Takahashi-Fujii,A., Oshima,A., Sugiyama,A., Kawakami,B., Suzuki,Y., Sugano,S., Nagahari,K., Masuho,Y., Nagai,K. and Isogai,T. NEDO human cDNA sequencing project Unpublished
3 (bases 1 to 1867)
Isogai,T. and Yamamoto,J.
                                                                                                                                                                                                                                                                                                                                                                                          Submitted (04-JUL-2002) Takao Isogai, FLJ Project (HRI Team); 2-6-7 Kazusa-Kamatari, Kisarazu, Chiba 292-0812, Japan (B-mail:genomics@hri.co.)p, Tel:s81-438-52-3975, Fax:81-438-52-3986 NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology (RAB); cDNA library construction: Helix Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAE HRI, and Biotechnology Center was a sequencing and Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: HRI and RAB.
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| 879GACTCCTTCCTCCGATTTTTGGAAAGAAGTGC 910  | -<br>2y            |
|--|--------------------|
| 1245 TGGGCAGCCGCAGGTGTGCTCTTGGGGGGCCAGGACGCCAGGGGCTTCCGAGGTGTTCACA 1304  | מם                 |
| 879 878  | Qy                 |
| 1185 GGGGAGCCGCCCTTGAGGCCCCCGGAGCCACGGAATAGCTGTCGCAGGGCGTGGAACCCCG 1244  | ממ                 |
| 879 878  | Qy                 |
| 1125 CGGCACCACGCTTTGTGAATGGGCCCTGGGGGGAGGTTCCGCTGCCTGGGGCCCCGATGC 1184   | מם                 |
| 879 878  | Qy                 |
| 1065 GCGGGTTAGAGATGGGCGGTGCCCGGGCTCCAGGCTGGGACCCCTCCGTGGGGAGCTCTG 1124   | AB, Db             |
| 879 878  | Qy                 |
| 1005 GCTGCTCTGGAGGCCCGGCTCCGTGGTGCGGAGCAGGCGCGGGAGGGTCCGGGGCTAGCG 1064   | ם ב                |
| 855 GCTGCTCTGGAGGCCCGGCTCCGT878  | Qy<br>86)          |
|  |                    |
| GCGCGACCCGCGCACCCGGCCTCCGGCTGCTGCCAGCACCCGCCACCTGGTGACCTT  | Q                  |
| 735 CCTGTGCCGCTGCTGGAGGTCACCCGCAGACCATCTTCATCACCTTCGAGGGCCAGAG 794   | Y., Qy             |
| 825 GGGTTGGGTGGGCCCAGCGTAGCACCCCACCCCTGACGGTCCCGCCCG   | da                 |
| 728  | ν, ,               |
| 683 TITCGGACGCCTTCCTGAGCCGGGCCTGGTGCAGCCACAGCTTCC727   | Qy<br>dd           |
| 705 CTGAGCCCTCCGCCGACCTCTTGGTGAACCTTGAGCCGCTGCCGACGCCTCATCGTGGTGC 764  | da                 |
| 623 CTGAGCCCTCCGCCGACCTCTTGGTGAACCTGAGCCGCTGCCGACGCCTCATCGTGGTGC 682   | Qy                 |
| 645 AGCTGGAGCGGCGTCGGGGCTACAAGCTCTTCCTGGACGACCGCGACCTCCTGCCGCGCG 704   | מם                 |
| 563 AGCTGGAGCGTCGGGGCTACAAGCTCTTCCTGGACGACCGCGCACCTCCTGCCGCGCG 622   | ρ                  |
| 597GCGACTGCCCCGAGGACCGCAAGTTCGTGAACTTCATCCTAAAGCCGC 644  | N., Db             |
| 503 ACGTCTCCTACAGCGACTGCCCCGAGGACCGCAAGTTCGTGAACTTCATCCTAAAGCCGC 562   | Qy                 |
| 559 TCTGGTACCAGGACGCGTATGGGGAGGTGGAGATAAAC596  | ,                  |
| TCTGGTACCAGGACGCGTATGGGGAGGTGGAGATAAACGACGGGGAAGCTCTACGACGCCT 50   |                    |
|  | A., Db             |
| TCCTGCTGGCCGCCTGGCCGCCCTGCTCTATGTCAAGTGCCGTCTCAACGTGCTGC   | s., o <sub>v</sub> |
| 323   TCACTICTTCAGAGAGCTIGGCCCTACAGATGCTIGGCTIG  | ;<br>              |
| CCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATCCA   | )<br>Db            |
| CCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATCCA   | y                  |
| 319 CCAGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTCCAGTGTCCTGGGGGTCAACGTGA 378   | ,, pb              |
| 203 CCTGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTCCAGTGTCCTGGGGGTCAACGTGA 262   | φ                  |
| Best Local Similarity 70.8%; Pred. No. 5.2e-77; Matches 994; Conservative 0; Mismatches 3; Indels 406; Gaps 3; | **<br>***          |

372 1062 432 1002 492 942

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                                                                                                                                                                                                                           Primer A: No primer
Primer B: No primer
STS size: 655.
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3595 John Hopkins Court, San
Tel: 18582029018
                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleost Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 655)
Nelson,R.M., Marnellos,G., Kammerer,S., Hoyal,C.R., Shi,M.M., Cantor,C.R. and Braun,A.
Large-Scale Validation of Single Nucleotide Polymorphisms in
                                                                                                                                                                                                                                                                                                                                        Contact: Andreas Braun Pharmaceuticals division
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CCGCTGCTGCGCAACCGCCACCTGGTGACCTTGCTGCTCTGGAGGCCCGGCTCCGTGACT
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                                                         Conservative
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                                                                                                                           /organism="Homo sapiens"
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AX525866.1
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Rattus norvegicus
Eukaryota, Metazoa, Chordata,
Mammalia, Eutheria, Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                        Farris,G., Hicken,S.H. and Farr,S.B.
Rat toxicologically relevant genes and
Patent: WO 02066682-A 388 29-AUG-2002;
Phase-1 Molecular Toxicology Inc. (US)
Location/Qualifiers
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cTGGCGCTGCCGGAAGGTGCGGTACAGGCCGGTGGAAGGAGACCCCCAGACGCAGCTG
                                                                      TTGCTGCTCTGGAGGCCCCGGCTCCGTGACTCCTCCGATTTTTGGAAAGAAGTGCAG
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                                                      CTGCTGCTTTGGAAGCCTGGCTCCGTGACACCTTCCTCTGATTTTTGGAAAGAGCTACAG
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/mol_type="unassigned DNA"
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              Aax88091 Human SIG
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Add20094 Human PRO
Add2096 Human PRO
Add219086 Human PRO
Add22969 PRO polyp
Aaf27859 Human DVP
Acd40262 Human bre
Add66744 CDNA enco
Add66744 CDNA enco
Add607254 Human NOV
Add119781 Human NOV
Add119781 Human NOV
Add19781 Human NOV
Add19781 Human PRO
Add60254 Human PRO
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Abk40277 CDNA enco
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| <b>.4</b><br>5     | 44                | 43                 | 42                 | 41                 | 40                 | 39                 | 38                 | 37                 | 36                 | <u>υ</u>           | 34                 | ü                  | 32                 | 31                 | 30                 | 29                 | 28                 | 27                 | 26                 | 25                 | 24                 | 23                 | 22                 | 21                 |
| 60.6               | 60.8              | 62.2               | 65.4               | 69.8               | 161.6              | 186                | 196.8              | 196.8              | 231.8              | 231.8              | 245.4              | 250.6              | 250.6              | 250.6              | 357                | 391.6              | 391.6              | 391.6              | 391.8              | 506.4              | 841                | 846.6              | 1025               | 1029.4             |
| 4.9                | 4.9               | 5.0                | υ<br>              | 5.7                | 13.1               | 15.1               | 16.0               | 16.0               | 18.8               | 18.8               | 19.9               | 20.3               | 20.3               | 20.3               | 29.0               | 31.8               | 31.8               | 31.8               | 31.8               | 41.1               | 68.2               | 68.7               | 83.1               | 83.5               |
| 567                | 570               | 567                | 567                | 259                | 266                | 388                | 407                | 407                | 322                | 322                | 249                | 557                | 557                | 557                | 676                | 641                | 641                | 641                | 575                | 851                | 2138               | 1090               | 1296               | 1442               |
| 13                 | w                 | 13                 | 13                 | 4                  | 4                  | 0                  | 12                 | 12                 | 12                 | 12                 | w                  | 10                 | 10                 | σ                  | 12                 | 13                 | 10                 | σ                  | <u>1</u> 3         | 4                  | 12                 | 7                  | ω                  | 12                 |
| ADR05990           | ABL50864          | ADR05992           | ADR05988           | AAK53693           | AAK61892           | ABN94880           | ADL87642           | ADL87641           | ADL87644           | ADL87643           | AAC06025           | ADB49677           | ADB55156           | ABK62170           | ADP46450           | ADR91262           | ADG31018           | ABT09300           | ADR26100           | AAH99795           | ADP46449           | ADR41330           | AAF18292           | ADM24440           |
| Adr05990 Human mut | Abl50864 Modified | Adr05992 Human mut | Adr05988 Human mut | Aak53693 Murine tr | Aak61892 Human imm | Abn94880 Gene #137 | Adl87642 DNA up-re | Adl87641 DNA up-re | Adl87644 DNA up-re | Adl87643 DNA up-re | Aac06025 Human sec | Adb49677 Primary r | Adb55156 Toxicity- | Abk62170 Rat seque | Adp46450 Human col | Adr91262 Spleen ne | Adg31018 Liver tox | Abt09300 Phase-1 R | Adr26100 Breast ca | Aah99795 Human pro | Adp46449 Human col | Adr41330 Human CD- | Aaf18292 Lung canc | Adm24440 Human PRO |

## ALIGNMENT'S

RESULT 1

AAX88091 standard; DNA; 1233

₽P.

08-SEP-1999 AAX88091;

(first entry)

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SIGIRR; anti-inflammatory; anti-autoimmune disease; chromosome 11; interleukin-1 receptor; 11p15.5; arthrogryposis multiplex congenita; breast cancer; insulin-depent diabetes; sickle cell anaemia; bladder cancer; detection; cell-signal transduction; gene therapy; immune regulation; cell proliferation; cell death; cell migration; cell interaction; inflammation; marker; mass spectrometry; human; ss
                                                                                                                        Sims JE,
                                                                                                                                                                                                                                                                                                                              Human SIGIRR DNA.
                                                                                                                                                             23-DEC-1997;
                                                                                                                                                                               23-DEC-1998;
                                                                                                                                                                                                                     WO9932626-A1
                                                                                                                                          (IMMV ) IMMUNEX CORP.
                                                                                                                                                                                                   01-JUL-1999.
                                                                                                                                                                                                                                        Homo sapiens
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                                                                                                                                                                                98WO-US027368.
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Human

This invention describes a novel human SIGIRR DNA, its allelic variants or species homologs which have anti-inflammatory and anti-autoimmune disease activity. SIGIRR is an analog of interleukin-1 receptor. The products of the invention are used (a) as probes or primers for identifying nucleic acid that encodes proteins with SIGIRR activity; (b)

WPI; 1999-418925/35. P-PSDB; AAY25426.

Claim 1; Page 68-69; 72pp; English.

New interleukin-1 receptor analog SIGIRR nucleic acid and

proteins

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CC to identify human chromosome 11, to map genes on this chromosome and to CC identify disease-related genes (particularly in the region 11p15.5 where CC genes are present associated with e.g. arthrogryposis multiplex CC congenita, breast cancer; insulin-dependent diabetes, sickle cell congenita, breast cancer; including detection of defective genes; (c) to study cell-signal transduction and the SIGIRR system, and (d) in gene CC therapy. Sense and antisense oligonucleotides can be used to inhibit CC expression of the SIGIRR gene. The proteins of the invention are used: (i) to study cellular processes (immune regulation, proliferation, death, CC instruction, interaction with other cells and inflammation); (ii) to CC identify and purify proteins that associate with SIGIRR ligands and CC receptors, and to measure their biological activity; (iv) in screening for, and rational design of, potential inhibitors of activity; (iv) crapputically against diseases mediated by SIGIRR polypeptide counterstructures; (v) as molecular weight (m.w.) markers in electrophoresis; (vi) for determining the extent of protein fragmentation (e.g. to aid characterization of antibodies (Ab); (ix) to deliver diagnostic or therapeutic generation of antibodies (Ab); (ix) to deliver diagnostic or therapeutic
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                                                                                                                                                                                                                                                                                                                                                                                   Human PRO cDNA sequence SEQ ID NO:53.
                                                                                                                                      28-OCT-2003; 2003WO-US034381
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes an isolated PRO nucleic acid (I). Also CC described: (I) a vector comprising (I); (2) a host cell comprising the vector of (I); (3) a process for producing a PRO polypeptides; (4) an CC isolated PRO polypeptide; (5) a chimeric molecule comprising the CC polypeptide of (4) fused to a heterologous amino acid sequence; (6) an CC antibody which specifically binds to a polypeptide of (4); (7) a CC composition of matter comprising a polypeptide of (4), an agonist or comprising a container, a label on the container and a composition of CC matter of (7); (9) a method of treating an immune related disease in a CC comprising a suspected of having the presence of a PRO polypeptide in a sample suspected of having the presence of a PRO polypeptide (II) a method of container and a composition of CC diagnosing an immune related disease or an inflammatory immune response in a mammal; (12) a method of identifying a compound that inhibits or CC in mammal; (12) a method of identifying a compound that inhibits or CC minics the activity of or expression of a gene encoding a PRO polypeptide; (11) a method of stimulating the immune response in a mammal. The CR properties the activity of or expression of a gene encoding a PRO polypeptide; (11) a method of container and a compound that inhibits or CC antisthmatic, antiallergic, antiannemic, antiarthritic, a
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CDNA; 1695 ВP

AD020094

12-AUG-2004 (first entry)

PRO polynucleotide

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XX Human; PRO; gene; ss; immune related disorder; systemic lupus erythematosus; rheumatoid arthritis; osteoartly juvenile chronic arthritis; systemic sclerosis; Sjogren's synvasculitis; sarcoidosis; autoimmune haemolytic anaemia; autoimmune thrombocytopenia; thyroiditis; diabetes mellitus; renal disease; demyelinating disease; central nervous system peripheral nervous system; demyelinating polyneuropathy; Guillain-Barre syndrome; osteoarthritis; system; syndrome;

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Best Local Similarity
Matches 1233; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to human PRO polypeptides and the polynucleotides encoding them. The polypeptides and polynucleotides are useful for treating and diagnosing immune related disorders in mammals. The immune related disorders include systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, systemic sclerosis, Sogren's syndrome, vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, demyelinating diseases of the central or peripheral nervous system, demyelinating polyneuropathy, Guillain-Barre syndrome and chronic inflammatory demyelinating polyneuropathy. This sequence represents a human PRO polynucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel PRO polypeptide e.g., PRO69614, PRO71106, or PRO86388 useful for treating an immune related disorder such as systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis or
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1695
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P-PSDB; ADO20095.
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Human; PRO; gene; ss; immune related disorder; systemic lupus erythematosus; rheumatoid arthritis; osteoarthritis; juvenile chronic arthritis; systemic sclerosis; Sjogren's syndrome; vasculitis; sarcoidosis; autoimmune haemolytic anaemia; autoimmune thrombocytopenia; thyroiditis; diabetes mellitus;
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                                                                            polynucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel PRO polypeptide e.g., PRO69614, PRO71106, or PRO86388 useful for treating an immune related disorder such as systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis or spondyloarthropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  renal disease; demyelinating disease; central nervous system; peripheral nervous system; demyelinating polyneuropathy; Guillain-Barre syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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hes 1233; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention
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DB; ADO19087.
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Wu TD;
                                          CAGAACATCAGCTTCTCCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCT
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                        CAGAACATCAGCTTCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCT
                                                                                                           AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATC
                                                                                                                                                             CACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTCC
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ss; gene; PRO; antiinflammatory; antiarthritic; antirheumatic;
immunosuppressive; osteopathic; antidiabetic; dermatological;
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The invention relates to a novel isolated nucleic acid and the PRO CC polypeptide encoded by it. A protein of the invention has antiinfiammatory, antiarthritic, antirheumatic, immunosuppressive, CC esteopathic, antidiabetic, dermatological, antipsoriatic, antiallergic, antialabetic, dermatological, antipsoriatic, antiallergic, cf. antiastimatic, hepatotropic, and respiratory activity. A polymucleotide of the invention may have a use in gene therapy. The PRO polypeptide, its agonist, antagonist, or antibody that specifically binds to the cystemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, cystemic streating an immune related disorder such as ystemic clupus erythematosys, rheumatoid arthritis, seceoarthritis, cyvenile chronic arthritis, a spondyloarthropathy, systemic sclerosis, an idiopathic inflammatory myopathy, Sjogren's syndrome, systemic clerosis, and idiopathic sarcoidosis, aucoimmune haemolytic anaemia, autoimmune chronic active active propensa, thyroiditis, diabetes mellitus, immune-mediated renal cleromic active propensa, thyroiditis, diabetes mellitus, immune-mediated renal crouse system, idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, a chronic inflammatory demyelinating polyneuropathy, a hepatobiliary clisease, infectious or autoimmune chronic active hepatitis, primary clisease, infectious or autoimmune chronic active hepatitis, primary clisease, infectious or autoimmune chronic active hepatitis, primary clisease, infectious or autoimmune chronic active hepatitis, brimary clisease, an autoimmune or immune-mediated skin disease, a bullous skin disease, an bullous skin disease, an autoimmune chronic active centeropathy, whipple's bullous skin disease, arthropathy, urticaria, an immunologic disease of the lung, contact dermatitis, poorlasis, an allergic rhintis, atopic dermatitis, hypereensitivity produced contact dermatitis, hypereensitivity articaria, an immunologic disease, a proprotein of the invention.
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Wu TD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antipsoriatic; antiallergic; antiasthmatic; hepatotropic; respiratory;
gene therapy; immune system.
                                                                                                                                                                                                                                                                     Sequence 1695
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                                                                                                                                                                       The present sequence encodes a new isolated polypeptide (NOVX). The NOVX CC polypeptides, NOVX nucleic acids, and anti-NOVX antibodies are useful for treating or preventing NOVX-associated disorders. They are also useful CC for determining the presence of or a predisposition to a disease associated with altered levels of the NOVX polypeptide or nucleic acid. These NOVX-associated disorders include hyperplasias, tumours, createnosis, psoriasis, Dupuyrren's contracture, disbetic complications, createnosis, psoriasis, Dupuyrren's contracture, disbetic complications, codema, senile dementia or Alzheimer's disbetic neuropathies, cerebral CC cedema, senile dementia or Alzheimer's disease. The NOVX polynucleotides are especially useful in gene therapy. Specifically, NOVX is useful as a CC disgnostic marker or prognostic marker, protein therapeutic and antibody CC target or small molecule drug target to treat disorders in the immune CC response pathway, thyroid and metabolic diseases, bone metabolic CC disorders, diseases of the pancreas (e.g. diabetes or digestive CC disorders), proliferative diseases, or tissue regeneration and CC development (e.g. wound healing or treatment of burns)
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16-MAR-2000;
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                                                                                                                                                     Sequence
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The invention relates to a new isolated NOV4 nucleic acid. The nucleic acid is useful for identifying a compound that binds the nucleic acid. The nucleic acid is useful in gene therapy, in screening assays, in detection assays e.g. chromosomal mapping, cell and tissue typing and forensic biology, predictive medicine e.g. diagnostic assays, prognostic assays, monitoring clinical trials and pharmacogenomics and methods of treatment including therapeutic and prophylactic. The nucleic acid is also useful for expressing NOVX protein. The nucleic acid is also useful for expressing NOVX protein. The nucleic acid is also useful in an in situ hybridisation technique, for identifying a specific tissue (for example brain tissue) and for use in forensic science. The nucleic acid is also useful for mapping genes on a chromosome and thus locating gene regions associated with genetic disease, identifying an individual from a minute biological sample and to aid in forensic identification of biological sample. The nucleic acid is also useful for treating cancer, especially cancers of the breast, colon, lung, pancreas or uterus, or a melanoma or sarcoma. The nucleic acid is also useful for treating.
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16-MAR-2000; 2000US-0189810P.
22-MAR-2000; 2000US-0191158P.
30-MAR-2000; 2000US-0193086P.
03-MAY-2000; 2000US-0201188P.
31-MAY-2000; 2000US-00584411.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tissue typing; cancer; breast cancer; colon cancer; lung cancer; sarcoma; pancreatic cancer; uterine cancer; organ transplantation disorder; ds; cardiovascular disease; melanoma; atherosclerosia; diabetes mellitus; ischaemic heart disease; haemorrhage; peripheral vascular disease; gene; thrombosis; hypertension; systemic lupus erythematosus; haematopoiesis; tissue regeneration; wound healing; hyperproliferative disorder; psoriasis; neural disorder; Parkinson's disease; Alzheimer's disease; Huntington's disease; multiple sclerosis; amyotrophic lateral sclerosis; neuropathy; neuropathy; nervous system tumour; neurotoxin; tremor; neuropathy; acute brain injury; peripheral nerve trauma; NoVX; gene therapy; epilepsy; breast tumour associated protein 47.
                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid sequence encoding a human breast tumor-associated protein 47-like polypeptide, useful for treating cardiovascular disorders, neural disorders, diabetes mellitus and cancers.
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Matches 1232; Conserv
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16-MAR-2000;
22-MAR-2000;
30-MAR-2000;
03-MAY-2000;
31-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; 88; gene; cell adhesion molecule; NOVX; cancer; leukaemia; lymphoma; melanoma; neurological disorder; epilepsy; ischaemic cerebrovascular disease; stroke; Alzheimer's disease; pick's disease; vesicular transport disorder; cystic fibrosis; diabetes mellitus; Grave's disease; golter; gastrointestinal disorder; ulcerative colitis; gastric ulcer; duodenal disorder; autoimmune diseas; allergic reaction; autoimmune haemolytic anaemia; rheumatoid arthritis; viral infection; bacterial infection; fungal infection; helminthic infection; protozoal infections.
     WPI; 2003-616079/58
                                                        Shimkets
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useful for treating e.g. cancers, bacterial, fungal, helminthic and
                                                                                                                                                                                nucleic acids encoding human cell adhesion molecule-like proteins, ful for treating e.g. cancers, neurological disorders, viral,
                                                                                                                                                                           and protozoal infections.
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P-PSDB; ADM56381

ij NO 17; English

Condition relates to an isolated nucleic acid encoding a human cell calcides and elevating a sequence appearing as sequence encoding a polypeptide having a sequence acid, a sequence encoding a polypeptide comparising at least 20 nucleotides. Also included are an oligonucleotide comparising at least 20 nucleotides. Also included are an oligonucleotide comparising at least 20 nucleotides. Also included are an oligonucleotide conditions with) the nucleic acid (or a portion of it), a vector comprising the nucleic acid, a cell comprising the vector; a process for producing the polypeptide, a compound that binds the nucleic acid, and a compound that binds the nucleic acid, and a compound identified by the process Disclosed as new are the CDNA and CC pharmaceutical carrier, a process for producing the pulled acid, and a compound identified by the process Disclosed as new are the CDNA and CC process for proved cell adhesion molecules (termed NOVX, being NOV1-23). CC manufacture of a medicament for treating a syndrome associated with a compound disease selected from NOVX-associated disorder, such as cancers (e.g. leukaemia, lymphoma, melanoma or cancer of the liver, lung, muscle, covary, testis and uterus), neurological disorders (e.g. epilepsy, testis and uterus), neurological disorders (e.g. epilepsy, testis and uterus), neurological disorders (e.g. epilepsy, testis and uterus), reurological disorders (e.g. epilepsy, testis and uterus), neurological disorders (e.g. epilepsy, testis and uterus), reurological disorders (e.g. epilepsy, testis and uterus), reurological disorders (e.g. epilepsy, testis and the testing), the process of the process melliture, Grave's disease, or goiter), gastrointestinal disorders), caucoimmune disease (e.g. allergic reactions, autoimmune haemolytic and protozoal infections. The polypeptides can be used as immunogens to produce antibodies and as vaccines. The sequences may further be used in compound that the SEQ ID numbers from table 3, the examples and the compound the the odd numbers from

Sequence 1659 BP; 296 A; 551 C; 504 G; 308 T; 0 U; 0 Other;

Query Match

Similarity

99.9%;

Score 1231.4; DB 1 Pred. No. 2.3e-236;

DB 11; Length

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cytostatic; hepatotropic; vulnerary; antipsoriatic; osteopathic;
antiarthritic; antiatherosclerotic; haemostatic; vasotropic;
                                        cDNA encoding novel human protein NOV9
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immunosuppressive; antiinflammatory; immunostimulant; fungicide;

kw virucide; protozoacide; neuroprotective; antirheumatic; antiarthritic;

kw antiasthmatic; antiparkinsonian; nootropic; anticonvulsant;

kw MOVX modulator; cancer; hyperproliferative disease; cirrhosis; keloid;

kw MOVX modulator; cancer; hyperproliferative disease; irishaemic disease;

kw atherosclerotic plaque formation; haemorrhage; ischaemic disease;

kw atherosclerotic plaque formation; haemorrhage; ischaemic disease;

kw atherosclerotic plaque formation; hypertension, hypothyroidism;

kw municials; autoimmune disorder; connective tissue disease;

kw multiple sclerosis; systemic lupus, erythematosus; rheumatoid arthritis;

kw multiple sclerosis; systemic lupus, erythematosus; rheumatoid arthritis;

kw autoimmune pulmonary inflammation; Guillain-Barre syndrome;

kw autoimmune thyroiditis; insulin dependent diabetes mellitus;

myasthenia graaft- versus-host disease;

kw myasthenia graaft- yeye disease; asthma; haematopoiesis;

kw autoimmune inflammatory eye disease; asthma; haematopoiesis;

kw tissue regeneration; wound healing; tissue repair; burn; incision; ulcer;

kw periodontal disease; Alzhemier's disease;

kw human; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             thrombolytic; antidiabetic; hypotensive; dermatalogical,
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Homo sapiens

US2003199103-A1

15-OCT-2001; 2001US-00977639

16-MAR-2000; 22-MAR-2000; 03-JUN-1999; 99US-0137322P

30-MAY-2000; ; 2000US-0189810P. ; 2000US-0191158P. ; 2000US-0193086P. ; 2000US-0201388P. ; 2000US-00584411.

CURAGEN CORP

RA, 'n Herrman J, Vernet

2004-021196/02.

Novel substantially NOVX polypeptide useful for diagnosing, preventing and treating diseases e.g., cancer, multiple sclerosis, systemic lupus

Disclosure; SEQ ID NO 17; 165pp; English

The invention describes a substantially purified polypeptide (I) having camino acid sequence chosen from a fully defined NOVX sequence (S1) of 708 CC amino acids as given in the specification, or polypeptide having one or conservative amino acid substitutions of (S1). (I) having (S1) is useful for diagnosing a pathological condition associated with (I) or its activity in a subject e.g. cancer. (I) useful in treatment of cancer hyperproliferative diseases, conservative plaque formation, haemorrhage, ischaemic heart or renal continuous products, diabetes mellitus, hypertension, hypothyroidism. (I) is useful in treatment of various immune deficiencies and disorders such as severe combined inmunodeficiency (SCID), bacterial infection, viral infection such as severe combined indunodeficiency (SCID), bacterial infection such as connective tissue disease, multiple contexting autoimmune disorders such as connective tissue disease, multiple contexting pulmonary inflammation, Guillain Barre syndrome, autoimmune contexting autoimmune disorders such as connective tissue disease, multiple contexting autoimmune dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease and contexting and tissue repair. (I) is also useful in treatment of burns, in sulin dependent diabetes mellitus, myasthenia gravis, concisions and tissue repair. (I) is also useful in treatment of burns, concisions and tissue repair. (I) is also useful in treatment of burns, concisions and tissue repair. (I) is also useful in treatment of burns, concertive because, Alzhemier's disease, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. (I) has effective

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and antiinflammatory activity. This sequence encodes a novel protein.
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03-JUN-1999; 99US-0137322P.
16-MAR-2000; 2000US-0189810P.
22-MAR-2000; 2000US-0191158P.
30-MAR-2000; 2000US-0193086P.
03-MAY-2000; 2000US-0201388P.
31-MAY-2000; 2000US-00584411.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; NOVX protein; cancer; hyperproliferative disease; cirrhosis; keloid; psoriasis; tissue hypertrophy; osteoarthritis; atherosclerotic plaque formation; haemorrhage; ischaemic heart disease; renal disease; thrombosis; diabetes mellitus; hypertension; hypothyroidism; severe combined immunodeficiency; SCID; infection; hypothyroidism; severe combined immunodeficiency; SCID; infection; mularia; candidiasis; autoimmune disorder; connective tissue disease; multiple sclerosis; systemic lupus erythematosus; rheumatoid arthritis; autoimmune pulmonary inflammation; Guillain-Barre syndrome; autoimmune inflammatory eye disease; graft versus-host disease; autoimmune inflammatory eye disease; arkinson's disease; harbenier's disease; Parkinson's disease; Huntington's disease; amyotrophic lateral sclerosis; Shy-Drager syndrome; harematopoiesis; wound healing; tissue repair; antitumor; antitumor;
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The invention relates to human NOVX polypeptides and polynucleotides. CC NOVX sequences are useful in the treatment of cancer, hyperproliferative diseases, cirrhosis, keloid, psoriasis, tissue hypertrophy, control of cancer to renal disease, thrombosis, diabetes mellitus, hypertension, heart or renal disease, thrombosis, diabetes mellitus, hypertension, control of the provides and disease, thrombosis, diabetes mellitus, hypertension, control of the priodontal disease, hypertension, hypertension, sometimes are disease, hypertension, control of the periodontal disease, candisorders such as severe combined immunodeficiency (SCID), bacterial confection, viral infection e.g. herpes viral infection, protozoan confection e.g. malaria, fungal infection e.g. candidissis, autoimmune confection e.g. malaria, fungal infection e.g. candidissis, autoimmune confection e.g. malaria, fungal infection e.g. candidissis, autoimmune confection, protozoan confection e.g. malaria, such autoimmune pulmonary confidential erythematosus, rheumatoid arthritis, autoimmune pulmonary confidential erythematosus, rheumatoid arthritis, autoimmune thyroiditis, insulin confidential erythematory eye disease. The invention is useful in regeneration and tissue growth of bone, cartilage, tendon, ligament, confidential ergulation, wound healing and tissue repair. Sequences of the invention also exhibit antitumor and antiinflammatory activities. The present sequence is human NOVX DNA.
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Secreted protein; NOVX; diagnosis; metabolic disorder; diabetes; obes: infection; anorexia; cancer; cardiovascular disease; hypertension; atherosclerosis; neurodegenerative disorder; Alzheimer's disease; parkinson's disease; pellepsy; immune disorder; osteoarthritis; haematopoietic disorder; inflammatory skin disorder; asthma; dyslipidemia; neurogenesis; cell differentiation; cell proliferation; dyslipidemia; neurogenesis; cell differentiation; cell proliferation; tissue typing; preventive medicine; pharmacogenomic; gene therapy; anorectic; cardiant; virucide; antibacterial; fungicide; protozoacide nootropic; neuroprotective; dermatological; human; gene; ds.
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16-MAR-2000;
22-MAR-2000;
30-MAR-2000;
03-MAY-2000;
31-MAY-2000;
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P46448 ADP46448 standard; DNA; 1833 BP. ADP46448;

DE Human colon specific nucleic acid SEQ ID NO:24

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entry.

ds; gene; human; colon specific protein; CSP; CSNA; cytostatic; vaccine;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a novel colon specific protein (CSP) (I) and the nucleic acid (CSNA) encoding it. A CSP of the invention has cytostatic activity. The protein is useful as a vaccine, and the nucleic acid may have a use in gene therapy. A CSP is useful for determining the presence of a colon specific protein in a sample. A CSNA is useful for determining the presence of a colon specific nucleic acid (CSNA) in a sample. The CSP and CSNA are useful for diagnosing or monitoring the presence and metastases of colon cancer in a patient. A method of the invention is useful for treating a patient with colon cancer. A CSP and CSNA are useful in identifying, diagnosing, monitoring, staging, imaging colon cancer and non-cancerous disease state in colon, and as a vaccine for treating colon cancer and non-cancerous disease states in colon. The present sequence represents a CSNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene therapy; colon specific nucleic acid; cancer; colon; chromosome 11p15.5.
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04-DEC-2002; 2002US-0431144P.
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                                                     CAGAACATCAGCTTCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCT
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Matches 1073;
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                                                                                                                                                                                                  The present invention relates to the isolation of novel human PRO polypeptides and the polynucleotide sequences encoding them. The PRO polypeptides, agonists, antagonists or anti-PRO antibodies are useful for treating benign or mallgnant tumours (e.g. renal, kidney, bladder, breating benign or mallgnant tumours (a.g. renal, chrey disorders such breast, etc), leukaemias and lymphoid malignancies, other disorders such as neuronal, glial, astrocytal, hypothalamic, glandular, macrophagal, stromal and blastocoelic disorders, inflammatory, immune and angiogenic disorders. The polynucleotide sequences are also useful in gene therapy. ABK40254-ABK40288 encode for the human PRO polypeptides of the invention
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11-MAR-1999;
11-MAY-1999;
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Watanabe
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22-JUN-1999;
22-JUN-1999;
                                                                                                                                                                                                                                                                                                                                       Thirty five nucleic acids encoding PRO polypeptides, useful for treating benign or malignant tumors, leukemias and lymphoid malignancies, inflammatory, angiogenic and immunologic disorders.
                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-205567/26.
P-PSDB; AAU86151.
                                                                                                                                                                                Sequence 1649 BP; 267 A; 554 C; 526 G; 302 T; 0 U; 0 Other;
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01-SEP-1999;
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30-NOV-1999;
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 CACTGCTCCCTGCCTTCAGTCCAGTGGCTGAAAGACGGGCTTCCATTGGGAATTGGGGGC
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                     CACTGCTCCCTGCCTTCAGTCCAGTGGCTGAAAGACGGGCTTCCATTGGGAATTGGGGC 180
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99US-0123972P
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99WO-US012252
99US-0140650P
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Pred. No. 1.7e-204;
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SULT 14 037328 0 ADJ37328 standard; cDNA; 1649 1 ADJ37328;

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DT 22-APR-2004 (first entry)
XX

3 Human tumour therapy associated PRO342 cDNA.
4 cytostatic; gene therapy; PRO; PRO197; PRO207; PRO226; PRO232; PRO243;

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The invention describes an isolated PRO polypeptide. The PRO polypeptide:
CC has at least 80% amino acid sequence identity to: (1) any one of 35 fully
CC defined sequences of 104-954 amino acids (designated P1-P35) given in the
Especification, with or without its associated signal peptide; (2) an
CC extracellular domain of any one of the polypeptides of P1-P35, with or
CC without its associated signal peptide; or (3) an amino acid sequence
CC encoded by the full-length coding sequence of the DNA deposited under
CC 209397, 209786, 209482, 209494, 209358, 203376, 209250, 209508, 209379,
CC PTA-255, PTA-618, PTA-545, PTA-256, 203538, 203661, 203855 or PTA-43; or
CC CC SCOTES at least 80% positives when compared to any one of the sequences
CC ENCOTES, PRO226, PRO232, PRO245, PRO256, PRO256, PRO2779, PRO1185, PRO279, PRO2185, PRO264, PRO313, PRO342, PRO575, PRO773, PRO861,
CC PRO1518, PRO202, PRO206, PRO264, PRO313, PRO342, PRO575, PRO773, PRO861,
CC PRO1518, PRO1686, PRO1800, PRO3562, PRO399, PRO5775, PRO7133, PRO861,
CC PRO1518, PRO202, PRO206, PRO264, PRO313, PRO342, PRO573, PRO861,
CC PRO1518, PRO202, PRO206, PRO264, PRO313, PRO342, PRO573, PRO861,
CC PRO1518, PRO1686, PRO1800, PRO3562, PRO575, PRO573, PRO773, PRO861,
CC PRO1216, PRO202, PRO206, PRO264, PRO313, PRO575, PRO573, PRO861,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated PRO polypeptides, useful as targets for the diagnosis, prevention and treatment of cancers, e.g. lymphoma, blastoma, sarco leukemia, and as predictors of the prognosis of tumor treatment.
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11-FEB-2000; 2000WO-US003565
09-AUG-2001; 2001US-00927796
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P-PSDB; ADJ37329.
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Query Match
Best Local Similarity 99.8
Matches 1073; Conservative
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11-FEB-2000;
09-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated antibody that binds to a PRO polypoptide. The methods and compositions of the present invention are useful for diagnosing, prognosticating and/or treating neoplastic tumours such as lung, colon, breast, prostate, rectal, cervical and liver tumours. The PRO polypoptides are also useful as molecular weight markers, or for chromosome identification. The PRO genes are useful as hybridisation probes, or for screening libraries of Human cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The present sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ashkenazi AJ, Goddard A, Godowski PJ,
Marsters SA, Pan J, Pitti RM, Roy MA,
Watanabe CK, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1649 BP; 267 A; 554 C; 526 G; 302 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 50; SEQ ID NO 47; 309pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated antibodies binding PRO polypeptides, useful for diagnosing, prognosticating and/or treating neoplastic tumors, such as lung, colon, breast, prostate, rectal, cervical and liver tumors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-020650/02.
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                                                                                                                                           CACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTCC
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CAGAACATCAGCTTCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCT
                                                                    AGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATC
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| GCCGGGCCCTGGACTCAGAGGTGGACCCGGACCCTGAGGCGACCTGGGTGTCC 1075      | Оу 1021 |
|   | Db 1064 |
|   | Оу 961  |
| AAAGAAGTGCAGCTGGCGCTGCCGCGGAAGGTGCGGTACAGGCCGGTGGAAGGACCCC      | Db 1004 |
|   | Оу 901  |
| 4 CACCTGGTGACCTTGCTGCTCTGGAGGCCCGGCTCCGTGACTCCTTCCT             | Db 944  |
| CACCTGGTGACCTTGCTGCTCTGGAGGCCCGGCTCCGTGACTCCTTCCT               | Оу 841  |
| TTCGAGGGCCAGAGCGCGACCCCGCGCACCCGGCTCCGCCTGCGCCAGCACCCGC         | Db 884  |
|   | Qу 781  |
| AGCTTCCGGGAGGCCTGTGCCGGCTGCTGGAGCTCACCCGCAGACCCATCTTCATCACC     | Db 824  |
|   | Оу 721  |
| # TGCCGACGCCTCATCGTGGTGCTTTCGGACGCCTTCCTGAGCCGGGCCTGGTGCAGCCAC  | Db 764  |
|   | Qу 661  |
| 4 GACCGCGACCTCCTGCCGCGCTGAGCCCTCCGCCGACCTCTTGGTGAACCTGAGCCGC    | ეტ 704  |
|   | Qу 601  |
| 4 GTGAACTTCATCCTAAAGCCGCAGCTGGAGCGGCGTCGGGGCTACAAGCTCTTCCTGGAC  | Db 644  |
|   | Qy 541  |
| 4 GACGGGAAGCTCTACGACGCCTACGTCTCCTACAGCGACTGCCCCGGAGGACCGCAAGTTC | Db 584  |
|   | Qy 481  |
| 4 AAGTGCCGTCTCAACGTGCTGCTCCTGGTACQAGGACGCGTATGGGGAGGTGGAGATAAAC | Db 524  |
| AAGTGCCGTCTCAACGTGCTGCTCTGGTACCAGGACGCGTATGGGGAGGTGGAGATAAAC    | Qy 421  |
| 4 GCGGTGCTGGCTCCTCCTGGTCCTGGCCCTGCTGCTGCTG                      | Db 464  |
| 1 GCGGTGCTGGCCCTCCTGGTCCTGGTCCTGGCCTGCTTGCTTGCTGC               | Qy 361  |
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Search completed: July 29, 2005, 22:29:56 Job time: 763 secs

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|   | BM675360<br>BM982596<br>BP448975<br>BP448975<br>BP2396048<br>BT758455<br>BF239133<br>BX392402<br>BQ23327<br>BI90593<br>BE250059<br>CD673345<br>BX341381<br>BM922484<br>BB1959688<br>BE3509688<br>BE3509688<br>BE352599<br>BB125299<br>BB125299<br>BB125299<br>BB125299<br>BB125299<br>BB125299<br>BB125299<br>BB125299<br>BB1252106<br>BW3552106<br>AV555413   |
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|   | BM675360 BM982596 BP448975 BF448975 B1820133 B1926048 B1756459 B1756459 B1905927 B1905928 B2250059 CCD673345 BX341381 BM922484 B1909988 B123590 BM923590 BM235590 BM714423   |

ALIGNMENTS

## REFERENCE AUTHORS TITLE JOURNAL ACCESSION VERSION KEYWORDS SOURCE ORGANISM RESULT 1 BM915345 LOCUS DEFINITION ORIGIN COMMENT FEATURES source cDNA Library Preparation: Rubin Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLCM2006 row: b column: 14 High quality sequence stop: 611. Location/Qualifiers Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov Tissue Procurement: DCTD/DTP Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1043) NIH-MGC http://mgc.nci.nih.gov/ BM915345 1043 bp mRNA linear EST 12-MAR-2002 AGENCOURT 6701721 NIH\_MGC\_41 Homo sapiens cDNA clone IMAGE:5481517 5', mRNA sequence. BM915345 National Institutes of Health, Mammalian Unpublished (1999) Homo sapiens Homo sapiens (human) BM915345.1 GI:19365724 /clone="IMAGE:5481517" /tissue\_type="amelanotic melanoma, cell line" /tissue\_type="amelanotic melanoma, cell line" /lab\_host="DH10B (phage-resistant)" /clone\_lib="NIH MGC 41" /clone\_lib="NIH MGC 41" /note="Organ: skin; Vector: pOTB7; Site\_1: XhoI; Site\_2: /note="Organ: skin; Vector: pOTB7; Site\_1: XhoI; Site\_2: /note="Organ: skin; Vector: poTB7; Site\_1: AhoI; Cloned into\_EcoRI/XhoI sites using the following 5: adaptor: into\_EcoRI/XhoI sites using the following 5: adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using\_ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH\_MGC Library." /organism="Homo sapiens" /mol\_type="mRNA" /db\_xref="taxon:9606" Gene Collection (MGC) Ď,

Query Match

65.48;

Score 806.4;

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1 (bases 1 to 763)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contract. Politics
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Tissue Procurement: Life Technologies, Inc.
cDNA Library Pragaration: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNI
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information of found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11455 row: i column: 21
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/clone lib="NNH MGC 116"
/note="Organ: pooled colon, kidney, stomach; Vector:
/note="Organ: pooled colon, kidney, stomach; Vector:
pcWV-SPORT6; Site 1: Not1; Site 2: EcoRV (destroyed); RNA
source anonymous pool of 3 colons, age 26 yo male, 49 yo
female, 71 yo male colon; 46 yo male kidney, and pool of 2
stomachs, 62 yo male and 70 yo female. Library is
oligo-dT primed and directionally cloned (EcoRV site is
destroyed upon cloning). Average insert size 1.4 kb,
insert size range 1-3 kb. Library is normalized and
enriched for full-length clones and was constructed by C.
Gruber (Invitrogen). Research Genetics tracking code
023. Note: this is a NIH_MGC Library."
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/db_xref="taxon:9606"
/clone="IMAGE:5182556"
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BG740350.1
EST.
                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.

Email: cgapbe-r@mail.nih.gov
Tissue Procurement: James Cleaver, M.D.

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) D

Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can
                                                                                                                                                                     found through the I.M.A.G.E. Consortium/LLNL http://image.lln1.gov plate: LLAM10636 row: i column: 02 High quality sequence stop: 856.
                                                                                                                                                                                                                                                                                                                       Unpublished (1999)
                                                                                                                                                                                                                                                                                                                               Mammalia; Eutheria; Primates; Catarrhini;
1 (bases 1 to 941)
NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health, Mammalian
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Mammalia; Eutheria; Primates;
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                                                                                                                                                                                                                                                                                                                                                                                                           sapiens (human)
                              /organism="Homo sapiens"

/mol type="mRNA"

/db_xref="taxon:9606"

/db_mref="taxon:9606"

/clone="IMAGE:4779337"

/lab_host="DH10B (T1 phage-resistant)"

/clone=lib="MCI CGAP Skn3"

/clone=lib="MCI CGAP Skn3"

/note="Organ: skin; Vector: pCMV-SPORT6; Site_1: NotI;

Site_2: Sal1; Cloned unidirectionally. Primer: Oligo

Average insert size 1.5kb. Library constructed by Lif
Technologies. Note: this is a NCI_CGAP Library."
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411 GCTCTATGTCAAGTGCCGTCTCAACGTGCTGCTCTGGTACCAGGACGCGTATGGGGAGGT
                                                                                                                                       Homo sapiens
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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0; Mismatches 8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished (2001) On May 13, 2003 this sequence version replaced gi:30618108. Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: segref@genoscope.cns.fr. Web: www.genoscope.cns.fr
18t strand cDNA was primed with a NotI-oligo(dT) primer F.
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                                   GGCCGGGCCCTGGACTCAGAGGTGGACCCGGACCCTGAGGGCGACCTGGGTGTCCGGGGG 1080
                                                                                                             CAGACGCAGCTGCAGGACGACAAGGACCCCATGCTGATTCTTCGAGGCCGAGTCCCTGAG 1020
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/cell_type="T CELLS (JURKAT CELL LINE) COT 10-NORMALIZED"
/cell_line="JURKAT"
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/mol_type="mRNA"
/db_xref="taxon:9606"
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JOURNAL COMMENT
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Best Local Similarity
Matches 728; Conserv
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Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
CDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can l
found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.
Plate: LLCM793 row: m column: 18
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1 (Dases 1 to 821)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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AGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATCCAGAACATCAGCTTCTCCTTC
                                                                                                                                                            GGGTCAAGGCCAA-CTGTCAGAGGTGCTTGTGTCCATGTGTCCTGGGGGGTCAACGTGACC
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                                                                       AGCACTGAAGTCTATGGGGCCTTCACCTGCTCCATCCAGAACATCAGCTTCTCCTCCTTC
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Location/Qualifiers
                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                    /cell lTne="MGC3"
//lab host="DH10B (phage-resistant)"
//lab host="DH10B (phage-resistant)"
//clone lbb="NIH MGC_7"
//clone lbb="NIH MGC_7"
//note="Organ: lung; Vector: pOTB7; Site_1: XhoI; Site_2: ECORI; CDNA made by oligo-dT priming. Directionally cloned into ECORI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone="IMAGE:3941561"
/tissue_type="small cell carcinoma"
/cell_line="MGC3"
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/db_xref="taxon:9606"
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Pred. No. 1.3e-137;
0; Mismatches 41;
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REFERENCE
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     Bource
              Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.inih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11555 row: g column: 14
High quality sequence stop: 780.
Location/Qualifiers
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1 (bases 1 to 852)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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/mol type="mRNA"
/db_xref="reaxon:9606"
/clone="IMAGE:5229901"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone lib="NIH MGC 120"
/rote="Organ: pooled pancreas and spleen; Vector:
/note="Organ: pooled pancreas and spleen; Vector:
pCMV-SPORT6; Site 1: NotI; Site 2: ECGRV (destroyed); RNA
source anonymous pool of spleen and pancreas from 28 yo
male. Library is oligo-dT primed and directionally cloned
(EcoRV site is destroyed upon cloning). Average insert
size 1.5 kb, insert size range 75 kb. Library is
normalized and enriched for full-length clones and was
constructed by C. Gruber (Invitrogen). Research Genetics
tracking code 025. Note: this is a NIH_MGC Library."
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98.7%;
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Pred. No. 4.7e-133;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   On May 8, 2003 this sequence version replaced g1:3045/NIB.
Contact: Genoscope
Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime
end enriched, double-strand cDNA was digested with Not I and cloned
into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library
was normalized. Library was constructed by Life Technologies, a
division of Invitrogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BX369506
BX369506.2 GI:46833010
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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GCCGAGTCCCTGAGGGCCCTGGACTCAGAGGTGGACCCGGACCCTGAGGGCGACC
                                                                                     TGGAAGGAGACCCCCAGACGAGCTGCAGGACGACAAGGACCCCCATGCTGATTCTTCGAG
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                                                            TGGAAGGAGACCCCCAGACGCAGCTGCAGGACGACGACCCCCATGCTGATTCTTCGAG
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/cell_Ype="TCELLS (JURKAT CELL LINE) COT 10-NORMALIZED"
/cell_line="JURKAT"
/clone_lib="Homo sapiens T CELLS (JURKAT CELL LINE) COT
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/db_xref="taxon:9606"
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Pred. No. 9.5
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Matches 641; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: LLAMI1450 row: d column: 16
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National Institutes of Health, Mammalian
Unpublished (1999)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae
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Location/Qualifiers
                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                         /clone lib="NIH MGC 115"
//clone lib="NIH MGC Library (destroyed); RNA
pcMV-SPORT6; Site 1: NotI; Site 2: EcoRV (destroyed); RNA
source anonymous pool of 6 male brains, age range 23-27; 1
male lung, age 27; and 1 male testis, age 69. Library is
oligo-dT primed and directionally cloned (EcoRV site is
destroyed upon cloning). Average insert size 1.8 kb,
insert size range 1-3 kb. Library is normalized and
enriched for full-length clones and was constructed by C.
Gruber (Invitrogen). Research Genetics tracking code
021. Note: this is a NIH MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5180511"
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Pred. No. 1.9e-128;
0; Mismatches 3;
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REFERENCE
AUTHORS
TITLE
JOURNAL
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ORGANISM
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VERSION
KEYWORDS
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                                                                                                     Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Sequencing by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.lnl.gov
Plate: LLAM11517 row: j column: 13
High quality sequence stop: 807.
Location/Qualifiers
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NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health, Mammalian Unpublished (1999)
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603057053F1 NIH_MGC_122
mRNA sequence.
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/lab_host="DH108"
/clone_lib="NIH_MGC_122"
                                              /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                            /organism="Homo sapiens
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/note="Organ: pooled lung and spleen; Vector: pCMV-SPORT6; Site 1: Not1; Site 2: EcoRV (destroyed); RNA source anonymous pool of 74 week female lung, 16 week female spleen, and 20-22 week male spleens. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.4 kb, insert size range 1-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 026. Note: this is a NIH_MGC Library."
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ORIGIN

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Query Match
Best Local S
Matches 637
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                                                                           AACTTCATCCTAAAGCCGCAGCTGGAGCGGCGTCGGGGCTACAA--GCTCTTCCTGGACG
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ACCGGGAACTCCTGCCGCGCGCGCTGAGCCCTCCGACGACTCTTGGTTGAACCTGA
                                                          AACTTCATCCTACAGCCGCAGCTGGAGCGGCGTCGGGGCTACAAAGCTCTTCCTTGGACG
                                                                                                                      GGGAAGCTCTACGACGCCTACGTCTCCTACAGCGACTGCCCCGAGGACCGCAAGTTCGTG
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Pred. No. 2.1e-123;
0; Mismatches 15;
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VERSION KEYWORDS SOURCE ORGANISM

Ното

sapiens sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

ACCESSION DEFINITION

sapiens cDNA CV026019

CV026019.1 Homo

GI:51483978 (human)

CV026019 621 bp mRNA linear EST 20-AU 3834 Full Length cDNA from the Mammalian Gene Collection Homo sapiens cDNA 5' similar to BC003591, mRNA sequence.

EST 20-AUG-2004

RESULT 10 CV026019 LOCUS

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Best Local
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Plate: 11010 row: 08 column: C
Seq primer: ACTGGCCGTCGTTTTACAACGTCGTGACTGGGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: Marc_Vidal@dfci.harvard.edu
ORF Sequence Tag (OST) of Gateway Entry c
results from a PCR reaction using an MGC
template DNA and ORF specific primers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 Jimmy Fund Way Smith 858,
Tel: 617 632 5180
Fax: 617 632 5739
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BACKWARD: TACATATCATCCTTGGACACCAG
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Dana Farber Cancer Institute
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CAGAACATCAGCTTCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCT 360
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol type="mRNA"
/db_xref="reaxon:9606"
/tissue_type="mixed"
/clone_Tib_"Full Length cDNA from the Mammalian Gene
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Pred. No. 3.1e-123;
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                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                           Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11455 row: i column: 21
High quality sequence stop: 733.
Location/Qualifiers
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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603041985T1 NIH_MGC_116 Homo
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/ Clone lib="NIH MGC 116"
//clone lib="NIH MGC Library (destroyed); RNA source anonymous pool of 3 colons, age 26 yo male, 49 yo female, 71 yo male colon, 46 yo male kidney, and pool of 2 stomachs, 62 yo male and 70 yo female. Library is oligo-dT primed and directionally cloned (EcoRV site is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.4 kb, insert size range 1-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 023. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5182556"
                                                                                                                                                                                                                                                                                              /lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                       organism="Homo sapiens"
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Query Match Best Local Similarity Matches 646; Conserv

Conservative

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Score 606.6; DB 4; Pred. No. 2.3e-121; 0; Mismatches 9;

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49.2%;

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AUTHORS
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SOURCE
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                                                                                Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: LLMM12807 row: p column: 16 High quality sequence stop: 655.
                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1106)
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AGENCOURT_6630582 NIH_MGC_116 Homo
5', mRNA Bequence.
                                                                                                                                                                                                                 NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
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BM924346.1
                                                                                                                                                                                                        Unpublished (1999)
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 GT-GCAGCCACA-GCTTCCGGGAGGGCCTGTGCCGGCTGCTGGAGCTCACCCGCAGACCC
                                                          GAGCCGCTGCCGACGCCTCATCGTGGTG-CTTTTCGGACGCCTT--CCTGAGCCGGGCCTG
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/clone_Iib="NHH0B"
/lab host="DH10B"
/clone_Iib="NHH MGC 116"
/note="Organ: pooled colon, kidney, stomach; Vector:
/note="Organ: pooled colon, kidney, stomach; Vector:
/note="Organ: pooled colon, kidney, stomach; 49 yo female, 71 yo male colon, 46 yo male kidney, and pool of 2 stomachs, 62 yo male and 70 yo female. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.4 kb, insert size range 1.3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 023. Note: this is a NIH_MGC Library."
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
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601584677F1 NIH MGC_7 Homo
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                                                                                                                                                           AGGCCTGCCTTGGGCAGCTCAGTGGCTCTGAACTGCACGGCTTGGGTAGTCTCTGGGCCC
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                          CACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTCAGAGGTGCTTGTGTCC
                                                                                CACTGCTCCCTTCAGTCCAGTGGCTGAAAGACGGGCTTCCATTGGGAATTGGGGGC
                                                                                                                                                                                                AGGCCTGCCTTGGGCAGCTCAGTGGCTCTGAACTGCACGGCTTGGGTAGTCTCTGGGCCC
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/db xref="taxon:9606"
/clone="IMAGE:3939162"
/tissue_type="small cell carcinoma"
/cell_line="MGC3"
/cell_line="MGC3"
                                                                                                                                                                                                                                                                                                                                                                                                                 /lab host="WHOE" (phage-resistant)"
/clone_lib="NIH_MGC_7"
/clone_lib="NIH_MGC_7"
/note="Organ: lung; Vector: pOTB7; Site 1: XhoI; Site 2:
EcoRI; cDNA made by oligo-dT priming. Directionally
cloned into EcoRI/XhoI sites using the following 5'
adaptor: GGCACGAG(G). Size-selected >500bp for average
insert size 1.8kb. Library constructed by Ling Hong in
the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP-cDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="Homo sapiens"
|mol_type="mRNA"
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Eliw.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization

AL Unpublished (2001)

AL Unpublished (2001)

Contact: Genoscope
Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: segref@genoscope.cns.fr, Web: www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-Oligo(GT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pcMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a
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BX341382
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                                                       /note="1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime and enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized."
                                                                                                                                                         /clone="CSODJO15YD03"
/cell type="T CELLS (JURKAT CELL LINE)
/cell_line="JURKAT"
/clone_lib="Homo sapiens T CELLS (JURKA
                                                                                                                                        0-NORMALIZED"
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/db_xref="taxon:9606"
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BM714596.1
EST.
           Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
University of Towa
375 Newton Road , 4156 MEBRF, Iowa City, IA 52242,
Tel: 319 335 8250
                                                                                                                                                                                                                                                     584 bp mRNA linear EST 28 UI-E-EJO-ahr-n-24-0-UI.xl UI-E-EJO Homo sapiens cDNA clone UI-E-EJO-ahr-n-24-0-UI 5', mRNA sequence.
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Bonaldo, M.F., Lennon, G. and Soares, M.B.
                                                                               8889548
                                                                                          Genome Res.
97044477
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3; Mismatches 14;
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Best Local Similarity
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Email: bento-soares@uiowa.edu
Tissue Procurement: Dr. Gregg Hageman
CDNA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
cDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
DNA Sequencing by: Dr. M. Bento Soares, Univeristy of Iowa
Clone Distribution: Researchers may obtain clones from Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genetics (www.resgen.com).
The following repetitive elements were found in this cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence: 35-104, >MER52#Unknown (matched compliment)
Seq primer: M13 Reverse.
   Conservative
                                                                                                                                                                      /note= Torgan: eye; Vector: pT7T3-Pac (Pharmacia) with a modified polylinker; Site 1: EcoR I; Site 2: Not I; UI-R-E30 is a subtracted CDNA library constructed according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded CDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT7T3-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tags for this library are: fetal eyes, AGAATCAAGA; lens, CGATTAGCCG; Rey anterior segment, AATGCCGCAT; optic nerve, CCATTAACTG; retina, CCGCG; Retina Foveal and Macular, GTCC; REE and Choroid, ACCTA. This library was created for the program, Gene Discovery in the Visual System, supported by National Eye Institute (NEI)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /dev_stage="fetal and adult"
/lab_host="DH10B (Life Technologies) (T1 phage resistant)"
/clone_lib="UI-E-EJ0"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Choroid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="UI-B-EJ0-ahr-n-24-0-UI"
/tissue_type="fetal eyes, lens, eye anterior segment,
optic nerve, retina, Retina Foveal and Macular, RPE a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="mRNA"
/db_xref="taxon:9606"
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Pred. No. 1.7e-114;
   Mismatches
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659 GCTGCCGACGCCTCATCGTGGTGCTTTCCGGACGCCTTCCCTGAGCCCGGCCCTGGTGCAGCC AGGGCCGGGCCCTGGACTCAGAGGTGGACCCGGACCCTGAGGGCGACCCTGGGTGTCCGGG CCCAGACGCAGCTGCAGGACGACAAGGACCCCATGCTGATTCTTCGAGGCCGAGTCCCTG GGAAAGAAGTGCAGCTGGCGCTGCCGCGGAAGGTGCGGTACAGGCCGGTGGAAGGAGACC GGAAAGAAGTGCAGCTGGCGCTGCCGCGAAGGTGCGGTACAGGCCGGTTGGAAGGAGAACC ACAGCTTCCGGGAGGGCCTGTGCCGGCTGCTGGAGCTCACCCGCAGACCCATCTTCATCA CCTTCGAGGGCCAGAGGCGCGACCCCGCGCGCTCCGCCTGCTGCGCCAGCACC ACAGCTTCCGGGAGGGCCTGTGCCGGCTGCTGGAGCTCACCCGCAGACCCATCTTCATCA GCTGCCGACGCCTCATCGTGGTGCTTTCGGACGCCTTCCTGAGCCGGGCCTGGTGCAGCC 1078 1018 718 360 300 958 898 838 60 180

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| Job ti               | <b>D</b>                                    | ş   | Дb  | Ş   | 망   | Ş  |
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A Geneseq_16Dec04:*
1: geneseqp1980s:*
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Pred. No. 18 the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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| Result<br>NO. | Score<br>2147<br>2147 | · · · n · · | Length<br>410<br>410 | 4 2 B | ID<br>   | Description Aay25426 Hu Aab61139 Hu |
|---------------|-----------------------|-------------|----------------------|-------|----------|-------------------------------------|
| 4.1           | 2147                  |             | 410                  | 7     | ADM56381 | Adm56381                            |
| , v           | 2147                  |             | 410                  | 8     | ADF66745 | Adf66745                            |
| თ             | 2147                  | •           | 410                  | 8     | ADI19782 | Adi19782                            |
| 7             | 2147                  | •           | 410                  | 8     | ADO60255 | Ado60255                            |
| 8             | 2147                  | •           | 410                  | 8     | ADO20095 | Ado20095                            |
| 9             | 2147                  | •           | 410                  | 8     | ADO19087 | Ado19087                            |
| 10            | 2147                  | 100.0       | 410                  | 8     | ADP54078 | Adp54078                            |
| H             | 2147                  | •           | 410                  | 8     | ADP22970 | Adp22970                            |
| 12            | 1876                  | ٠           | 504                  | ហ     | AAU86151 | Aau86151                            |
| ដ             | 1876                  | 87.4        | 504                  | 7     | ADJ37329 | Adj37329                            |
| 14            | 1876                  | 87.4        | 504                  | 8     | ADG68253 | Adg68253                            |
| 15            | 1761                  | •           | 407                  | 4.    | AAU17408 | Aau17408                            |
| 16            | 1761                  | •           | 407                  | 4     | AAM43652 | Aam43652                            |
| 17            | 1761                  | •           | 407                  | 7     | ADB94116 | Adb94116                            |
| 18            | 1761                  | 82.0        | 407                  | œ     | ADM24673 | Adm24673                            |
| 19            | 1761                  | •           | 410                  | 4     | AAM43583 | Aam43583                            |
| 20            | 1761                  | •           | 410                  | 8     | ADM24604 | Adm24604                            |
| 21            | 1749                  | •           | 363                  | w     | AAB58416 | Aab58416                            |
| 22            | 1265                  | •           | 329                  | 8     | ADP46560 | Adp46560                            |
| 23            | 1265                  | •           | 361                  | 8     | ADP46559 | Adp46559                            |
| 24            | 1124                  | •           | 289                  | ហ     | ADR41506 | Adr41506                            |
| Š             | 974.5                 | 45.4        | 212                  | ۵     | AAM25854 | Aam25854                            |

| 45       | 44       | 43       | 42        | 41       | 40       | 39       | 38       | 37       | 36       | 35       | 34       | 33       | 32       | 31       | 30       | 29       | 28       | 27       | 70       |
|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 256.5    | 256.5    | 256.5    | 256.5     | 256.5    | 256.5    | 256.5    | 256.5    | 256.5    | 257.5    | 257.5    | 257.5    | 258.5    | 267.5    | 267.5    | 267.5    | 267.5    | 267.5    | 542      | 100      |
| 11.9     | 11.9     | 11.9     | 11.9      | 11.9     | 11.9     | 11.9     | 11.9     | 11.9     | 12.0     | 12.0     | 12.0     | 12.0     | 12.5     | 12.5     | 12.5     | 12.5     | 12.5     | 25.2     | 29.4     |
| 696      | 696      | 668      | 668       | 486      | 486      | 486      | 481      | 481      | 579      | 579      | 579      | 899      | 686      | 686      | 686      | 686      | 658      | 113      | 104      |
| 4        | w        | 7        | ഗ         | 7        | ເກ       | N        | S        | 4        | 7        | v        | N        | 8        | 7        | σ        | ம        | N        | N        | ທ        | α        |
| AAM78808 | AAY95298 | ADB31986 | AAE16589  | ADB31971 | AAE16575 | AAY14129 | ABP66934 | ABB10347 | ADB31953 | AAE16566 | AAY14130 | ABO84438 | ADB31955 | ABP43986 | AAE16567 | AAY14128 | AAY22164 | ADK36203 | AUPROSOL |
| Aam78808 | Aay95298 | Adb31986 | Aae16589  | Adb31971 | Aae16575 | Aay14129 | Abp66934 | Abb10347 | Adb31953 | Aae16566 | Aay14130 | Abo84438 | Adb31955 | Abp43986 | Aae16567 | Aay14128 | Aay22164 | Adk36203 | тосовдин |
| Human    | Human    | Primate  | Human int | Primate  | Human    | Human    | Human    | ' Human  | Human    | Human    | Human    | Mouse    | -        | Receptor | ' Human  | Human    | Human    | Novel    | Tremon   |

## ALIGNMENTS

AAY25426;

AAY25426 standard; protein;

410

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SIGIRR; anti-inflammatory; anti-autoimmune disease; chromosome 11; interleukin-1 receptor; 11pl5.5; arthrogryposis multiplex congenita; breast cancer; insulin-dependent diabetes; sickle cell anaemia; bladder cancer; detection; cell-signal transduction; gene therapy; immune regulation; cell proliferation; cell death; cell migration; 01-JUL-1999. 08-SEP-1999 23-DEC-1997; 23-DEC-1998; WO9932626-A1 Homo sapiens. cell interaction; inflammation; marker; mass spectrometry; human. Human SIGIRR protein (first entry) 97US-0068770P 98WO-US027368

(IMMV ) IMMUNEX CORP

Sims JE;

WPI; 1999-418925/35. N-PSDB; AAX88091.

New interleukin-1 receptor analog SIGIRR nucleic acid and proteins.

Claim 2; Page 69-71; 72pp; English.

This invention describes a novel human SIGIRR DNA, its allelic variants or species homologues which have anti-inflammatory and anti-autoimmune disease activity. SIGIRR is an analog of interleukin-1 receptor. The products of the invention are used (a) as probes or primers for identifying nucleic acid that encodes proteins with SIGIRR activity; (b) to identify human chromosome 11, to map genes on this chromosome and to identify disease-related genes (particularly in the region 11p15.5 where genes are present associated with e.g. arthrogryposis multiplex congenita, breast cancer, insulin-dependent diabetes, sickle cell anaemia, bladder cancer), including detection of defective genes; (c) to

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AAB61139
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AC AAB6
AC AAB6
XX Huma
CH Huma
CH Huma
KW Cere
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KW diab
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Best Local :
                                                                                                                                             Human; NOVX; antiinflammatory; cytostatic; neuroprotective; cerebroprotective; immunomodulator; vulnerary; vasotropic; gene ther hyperplasis; tumour; restenosis; psoriasis; Dupuytren's contracture; diabetes; rheumatoid arthritis; cerebral oedema; Alzheimer's disease
 01-JUN-2000; 2000WO-US015303
                                    14-DEC-2000
                                                                          WO200075321-A2
                                                                                                            Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                      AAB61139 standard;
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16-MAR-2000;
22-MAR-2000;
30-MAR-2000;
31-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence is a new isolated polypeptide (NOVX). The NOVX polypeptides, NOVX nucleic acids, and anti-NOVX antibodies are useful for treating or preventing NOVX-associated disorders. They are also useful for determining the presence of or a predignosition to a disease associated with altered levels of the NOVX polypeptide or nucleic acid. These NOVX-associated disorders include hyperplasias, tumours, restenosis, psoriasis, Dupuytren's contracture, diabetic complications, rheumatoid arthritis, cerebral lesions, diabetic neuropathies, cerebral oedema, senile dementia or Alzheimer's disease. The NOVX polymucleotides are especially useful in gene therapy. Specifically, NOVX is useful as a diagnostic marker or prognostic marker, protein therapeutic and antibody target or small molecule drug target to treat disorders in the immune response pathway, thyroid and metabolic diseases, bone metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disorders, diseases of the pancreas (e.g. diabetes or digestive disorders), proliferative diseases, or tissue regeneration and development (e.g. wound healing or treatment of burns)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New NOVX polypeptides and polynucleotides, useful in gene therapy, as a diagnostic marker, protein therapeutic, antibody or small molecule drug target for treating immune, proliferative and metabolic diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 410
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DB; AAF27857.
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PVFGEPSAPPHTSGVSLGESRSSEVDVSDLGSRNYSARTDFYCLVSKDDM
                                                                KBVQLALPRKVRYRPVEGDPQTQLQDDKDPMLILRGRVPEGRALDSEVDPDPEGDLGVRG
                                                                                                                 SFREGLCRLLELTRRPIFITFEGQRRDPAHPALRLLRQHRHLVTLLLWRPGSVTPSSDFW
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; 2000US-0191158P.
; 2000US-0193086P.
; 2000US-00137322.
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Pred. No. 1
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The invention relates to a new isolated NOV4 nucleic acid. The nucleic acid is useful for identifying a compound that binds the nucleic acid. The nucleic acid is useful in gene therapy, in screening assays, in a detection assays e.g. chromosomal mapping, cell and tissue typing and assays, monitoring clinical trials and pharmacogenomics and methods of treatment including therapeutic and prophylactic. The nucleic acid is also useful for expressing NoVX protein. The nucleic acid is also useful for expressing NoVX protein. The nucleic acid is also useful compound to technique, for identifying a specific tissue (for example brain tissue) and for use in forensic science. The nucleic acid is also useful for mapping genes on a chromosome and thus locating gene regions associated with genetic disease, identifying a mindividual from a minute biological sample and to aid in forensic identifying and individual for mapping senses on a chromosome and thus locating gene regions associated with genetic disease, identifying an individual for mapping senses, identifying an individual composical sample. The nucleic acid is also useful for treating cancer, especially cancers of the breast, colon, lung, pancreas or uterus, or a melanoma or sarcoma. The nucleic acid is also useful for treating cancer, atherosciarosis, ischaemic heart disease, haemorrhage, diabetes mellitus, peripheral vascular disease, thrombosis, hypertension and systemic lupus crythematosus. NOVX protein encoded by the nucleic acid is useful for regulating haematopolesis, for regeneration of bone, cartilage, tendon colligament and/or nerve tissue growth or regeneration and for wound
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16-MAR-2000;
22-MAR-2000;
30-MAR-2000;
03-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New nucleic acid sequence encoding a human breast tumor-associated protein 47-like polypeptide, useful for treating cardiovascular disorders, neural disorders, diabetes mellitus and cancers.
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N-PSDB; ACD40262.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure;
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ischaemic cerebrovascular disease; stroke; Alzheimer's disease;
ischaemic cerebrovascular disease; stroke; Alzheimer's disease;
Pick's disease; vesicular transport disorder; cystic fibrosis;
diabetes mellitus; Grave's disease; golter; gastrointestinal disorder;
ulcerative colitis; gastric ulcer; duodenal disorder; autoimmune disease;
ulcerative colitis; gastric ulcer; duodenal disorder; autoimmune disease;
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                                                                                                                                                                                                                                                        Homo sapiens
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Pred. No. 1.2e-218;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                             CC pharmaceutical carrier, a process for producing the nucleic acid and a CC process for identifying a compound that binds the nucleic acid, and a CC process for identifying a compound that binds the nucleic acid, and a CC process for identified by the process. Disclosed as new are the cDNA and CC compound identified by the process. Disclosed as new are the cDNA and CC proteins for novel cell adhesion molecules (termed NOVX, being NOVI-23). CC The NOVX polypeptide, nucleic acid or antibody are useful in the CC manufacture of a medicament for treating a syndrome associated with a CC (e.g. leukaemia, lymphoma, melanoma or cancer of the liver, lung, muscle, ovary, testis and uterus), neurological disorders (e.g. epilepsy, CC ischaemic cerebrovascular disease, stroke, Alzheimer's disease or pick's disease), disorders of vesicular transport (e.g. cystic fibrosis, CC disbetes mellitus, Grave's disease, or goiter), gastrointestinal CC disorders (e.g. ulcerative colitis, or gastric and duodenal disorders), autoimmune diseases (e.g. allergic reactions, autoimmune haemolytic candemia, or rheumatoid arthritis), viral, bacterial, fungal, helminthic CC and protozoal infections. The polypeptides can be used as immunogens to produce antibodies and as vaccines. The sequences may further be used in chromosome mapping, identifying individual from minute biological samples (tissue typing), and in forensic identification of a biological samples (colored the sequences as they appear on pages CC laims that the SEQ ID numbers for the cDNAs should be the odd numbers (colored in sequence represents a NOVX cell adhesion molecule of the colored in the colored colored in the colored co
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Best Local (
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31-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          adhesion molecule-like protein, comprising a sequence encoding a polypeptide having a sequence appearing as ADM56387, a sequence at least 90% identical to the nucleic acid, a sequence encoding a polypeptide having conservative amino acid substitutions to the protein or a fragment comprising at least 20 nucleotides. Also included are an oligonucleotide sequence that is complementary to (and hybridises under stringent conditions with) the nucleic acid (or a portion of it), a vector comprising the nucleic acid, a cell comprising the vector, a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acids encoding human cell adhesion molecule-like proteins, useful for treating e.g. cancers, neurological disorders, viral, bacterial, fungal, helminthic and protozoal infections.
                                                                                                                                                                                                                                                                                                                                                           Sequence 410
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Novel substantially NOVX polypeptide useful for diagnosing, preventing and treating diseases e.g., cancer, multiple sclerosis, systemic lupus

preventing

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RESULT 6
ADI19782
ID ADI1
XX
AC ADI1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention describes a substantially purified polypeptide (I) having CC amino acids sequence chosen from a fully defined NOVX sequence (S1) of 708 CC amino acids sequence (S1) of 708 CC amino acids sequence as given in the specification, or polypeptide having one or conservative amino acid substitutions of (S1), or mutant or variant CC (f) useful in treatment of cancer, hyperproliferative diseases, condition associated with (I) or its activity in a subject e.g. cancer. (I) useful in treatment of cancer, hyperproliferative diseases, circumbosis, keloid, psoriasis, tissue hypertrophy, osteoarthritis, CC disease, thrombosis, diabetes mellitus, hypertension, hypothyroidism. (I) is useful in treatment of various immune deficiencies and disorders such as severe combined immunodeficiency (SCID), bacterial infection, viral infection such as severe combined inmunodeficiency (SCID), bacterial infection such as candidiasis. (I) is also useful in treatment disorders such as candidiasis. (I) is also useful in treating autoimmune disorders such as candidiasis. (I) is also useful in CC cautoimmune pulmonary inflammation, Guillain-Barre syndrome, autoimmune cliscured in such as connective tissue disease, multiple sclerosis, systemic lupus, erythematosus, rheumatoid arthritis, cc sclerosis, systemic lupus, erythematosus, rheumatoid arthritis, useful in regulation of haematopolesis, regeneration and cc issue growth of bone, cartilage, tendon, ligament and useful for wound healing and tissue repair. (I) also useful in treatment of burns, cd isease, Alzhemier's disease, Parkinson's disease, Huntington's disease, amovel human NOVX protesin.
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Best Local (
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                                                                                                                                                                         PVFGEPSAPPHTSGVSLGESRSSEVDVSDLGSRNYSARTDFYCLVSKDDM 410
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                                                                                                                                                                                                                                                                                                                                                                                                             VNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLIVVLSDAFLSRAWCSH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MPGVCDRAPDFLSPSEDQVLRPALGSSVALNCTAMVVSGPHCSLPSVQMLKDGLPLGIGG
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                                                                                                                                                     PVFGEPSAPPHTSGVSLGESRSSEVDVSDLGSRNYSARTDFYCLVSKDDM
                                                                                                                                                                                                                                 KEVQLALPRKVRYRPVEGDPQTQLQDDKDPMLILRGRVPEGRALDSEVDPDPEGDLGVRG
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Pred. No. 1.2e-218;
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03-JUN-1999;
16-MAR-2000;
22-MAR-2000;
30-MAR-2000;
                                                                                                                                                                                                                                           New NOVX nucleic acids encoding human KIAA0768 protein-like and h
protein PRO-228 polypeptides, useful for treating NOVX-associated
                                                                                                                                                                                                             Disclosure;
                                                                                                                                                                                                                                                                              N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Parkinson's disease; epilepsy; immune disorder; osteoarthritis; haematopoietic disorder; inflammatory skin disorder; asthma; haematopoietic disorder; inflammatory skin disorder; asthma; dyslipidemia; neurogenesis; cell differentiation; cell proliferation; haematopoiesis; wound healing; angiogenesis; chromosome mapping; tissue typing; preventive medicine; pharmacogenomic; gene therapy; anorectic; cardiant; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; dermatological; human.
                                                                                                                                                                                                                                                                                          WPI; 2004-070737/07
                                                                                                                                                                                                                                                                                                             Shimkets RA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Secreted protein; NOVX; diagnosis; metabolic
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                                                                                                                                                                                                                                                                                                                                    (CURA-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                    CURAGEN CORP.
                                                                                                                                                                                                                                                                               ADI19781.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   anorexia; cancer; cardiovascular disease; hypertension,
                                                                                                                                                                                                                                                                                                                                                        99US-0137322P.
2000US-0189B10P.
2000US-0191158P.
2000US-0193086P.
2000US-0201388P.
2000US-00584411.
                                                                                                                                                                                                           SEQ ID NO 18; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                      2001US-00977819
                                                                                                                                                                                                                                                                                                              Fernandes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note = Extracellular domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           note= "Encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
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                                                                                                                                                                                                                                                                                                              Herrman
                                                                                                                                                                                                                                                                                                            JI,
                                                                                                                                                                                                                                                                                                              Vernet CAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disorder; diabetes; obesity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         disease;
                                                                                                                                                                                                                                                        human
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The present invention is based in part on the discovery of novel secreted CC and membrane-bound polypeptides and their encoding polymucleotides. The CC nucleic acids and polypeptides are collectively referred as NOVX. The CC invention is useful for treating, preventing and diagnosing diseases such as CC viral, bacterial, fungal, helminthic and protozoal infections, anorexia, CC cancer, cardiovascular diseases such as hypertension and atherosclerosis, CC neurodegenerative disorders, Alzheimer's disease, Parkinson's disease, CC epilepsy, immune disorders such as osteoarthritis, haematopoietic CC disorders, inflammatory skin disorders, asthma and various dyslipidemias. The invention is also useful as targets for the identification of small CC molecules that modulate or inhibit e.g. neurogenesis, cell coliferentiation, cell proliferation, haematopoiesis, wound healing and cangiogenesis, as hybridisation probes, in chromosome mapping, tissue ctyping, preventive medicine and pharmacogenomics. The invention is also useful in gene therapy. The present sequence is human NOV protein.

Sequence 410 À

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Query Match
Best Local Similarity
Matches 410; Conserv
Conservative
        100
.0%; Score 2147;
.0%; Pred. No. 1.:
0; Mismatches
         DB 8;
.2e-218;
0,
                 Length
 Indels
                  410;
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Gaps
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AD06025
ID AD066
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AD066
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AD06
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16-MAR-2000; 2000US-0199810P.
22-MAR-2000; 2000US-0191158P.
30-MAR-2000; 2000US-0193086P.
03-MAY-2000; 2000US-0201188P.
31-MAY-2000; 2000US-00584411.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; NOVX protein; cancer; hyperproliferative disease; cirrhosis; keloid; psoriasis; tissue hypertrophy; osteoarthritis; atherosclerotic plaque formation; haemorrhage; ischaemic heart disease; renal disease; trombosis; diabetes mellitus; hypertension; hypothyroidism; severe combined immunodeficiency; SCID; infection; malaria; candidiasis; autoimmune disorder; connective tissue disease; multiple sclerosis; systemic lupus erythematosus; rheumatoid arthritis; autoimmune pulmonary inflammation; Guillain-Barre syndrome; autoimmune thyroiditis; myasthenia gravis; graft- versus-host disease; autoimmune inflammatory eye disease; asthma; burn; incision; ulcer; periodontal disease; Alzhemier's disease, Parkinson's disease; Huntington's disease; amyotrophic lateral sclerosis; Shy-Drager syndrome; haematopoiesis; wound healing; tissue repair; antitumor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADO60255 standard; protein;
      WPI; 2004-068928/07
                                                             Shimkets
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CC NOVX sequences are useful in the treatment of cancer, hyperproliferative CC diseases, cirrhosis, keloid, psoriasis, tissue hypertrophy, costeoarthritis, atherosclerotic plaque formation, haemorrhage, ischaemic cc heart or renal disease, thrombosis, diabetes mellitus, hypertension, cc hart or renal disease, thrombosis, diabetes mellitus, hypertension, protocoan cc hypothyroidism, asthma, burns, incisions, ulcers, periodontal disease, cc Alzhemier's disease, Parkinson's disease, Huntington's disease, cc amyotrophic lateral sclerosis, shy-brager syndrome, immune deficiencies and disorders such as severe combined immunodeficiency (SCID), bacterial cinfection, viral infection e.g. harpes viral infection, protocoan cc infection, viral infection e.g. candidasis, autoimmune cc inflammation, Guillain-Barre syndrome, autoimmune pulmonary cc inflammation, Guillain-Barre syndrome, autoimmune pulmonary cc dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. The invention is useful in cregeneration and tissue growth of bone, cartilage, tendon, ligament, cc haematopoiesis regulation, wound healing and tissue repair. Sequences of the invention also exhibit antitumor and antiinflammatory activities. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel substantially purified NOVX polypeptide for treating severe combined immunodeficiency, candidiasis, cancer, asthma, multiple sclerosis, systemic lupus erythematosus.
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                                                        present sequence is human NOVX protein.
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Sequence 410

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RESULT 8
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ADO20095 standard;

protein;

12-AUG-2004 AD020095;

(first entry)

Human PRO polypeptide #502

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                                       The invention relates to human PRO polypeptides and the polynucleotides encoding them. The polypeptides and polynucleotides are useful for treating and diagnosing immune related disorders in mammals. The immune related disorders include systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, systemic sclerosis, Sjogren's syndrome, vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes meallitus, immune-mediated renal disease, demyelinating diseases of the central or peripheral nervous system, demyelinating polyneuropathy, Guillain Barre syndrome and chronic inflammatory demyelinating polyneuropathy. This sequence represents a human PRO polypeptide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; PRO; immune related disorder; systemic lupus erythema rheumatoid arthritis; osteoarthritis; juvenile chronic arthritis; stemic sclerosis; Sjogren's syndrome; vasculitis; sarcoido autoimmune haemolytic anaemia; autoimmune thrombocycopenia; diabetes mellitus; renal disease; demyelinating disease; central nervous system; peripheral nervous system; demyelinating polyneuropathy; Guillain-Barre syndrome; chronic inflammatory demyelinating polyneuropathy.
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N-PSDB; ADO19086.
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RESULT 10
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                                                             New PRO polynucleotides and polypeptides, useful in useful in diagnosing and treating an immune related disease, e.g. systemic lupus erythematosus, rheumatoid arthritis, diabetes mellitus or asthma and in
                          Claim 1;
                                                                                                                    WPI; 2004-376182/35
N-PSDB; ADP54077.
                                                                                                                                                                                                                                                                                                                                                                                                       antiasthmatic; antidiabetic; antiinflammatory; antipsoriatic;
antirheumatic; antithyroid; CNS; dermatological; gastrointestinal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADP54078
                                                  stimulating an immune
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                                                                                                                                                                                                                                                                                                                                                                virucide; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                           haemostatic; hepatotropic; immunostimulant; immunosupprenephrotropic; neuroprotective; osteopathic; respiratory;
                                                                                                                                                                                                                                                                                                                                                                                                                                   immune
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                                                                                                                                                                                                                                                                                                                                                                                                                               PRO; immune related disease; inflammatory immune response; response stimulation; antiallergic; antianaemic; antiarthritic;
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'S T
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                          SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
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                                                                                                                                                          Clark
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                      NO 54; 3009pp; English.
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                                                   response
                                                                                                                                                                           Gurney
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                                                                                                                                                                           Schoenfeld
                                                                                                                                                                                                                                                                                                                                                                                         immunosuppressive; muscular;
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present

invention

describes an isolated

PRO nucleic acid (I).

Also

PRO; antiinflammatory; antiarthritic;

antirheumatic;

immunosuppressive;

PRO polypeptide 18-NOV-2004

NO:64

RESULT 11
ADP22970
ID ADP22
XX
AC ADP22
XX
DT 18-NC
DT 18-NC
XX
XX
XX
PRO;
KW PRO;

(first SEQ ID

entry)

ADP22970 standard;

protein;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC vector of (1); (3) a process for producing a PRO polypeptides; (4) an accidence; (4) an accidence; (4) an accidence; (6) an expectation of the polypeptide of (4) fused to a heterologous amino acid sequence; (6) an accidence; (7); (8) an activate of (7); (9) a method of container and a composition of accidence; (1) a method for determining the presence of a PRO polypeptide of (1); (1) a method for determining the presence of a PRO polypeptide of a sample suspected of having the presence of a PRO polypeptide of in a sample suspected of having the presence of a PRO polypeptide of in a sample suspected of having the presence of a PRO polypeptide of in accidence; (12) a method of identifying a compound that inhibits or accidence; (12) a method of identifying a compound that inhibits or accidence; (13) a method of stimulating the immune response in a mammal. The PRO sequences have antiallergic, antianaemic, antiarthritic, antiarthritic, neuroprotective, osteopathic, antiapsoriatic, neuroprotective, osteopathic, respiratory, vasotropic and conspiration and the encoded polypeptides, compositions, kits and methods are useful in diagnosing and treating an immune related disease and in accidence acciden
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Best Local Sin
Matches 410;
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                                            PVFGEPSAPPHTSGVSLGESRSSEVDVSDLGSRNYSARTDFYCLVSKDDM
                                                                                                                           KEVQLALPRKVRYRPVEGDPQTQLQDDKDPMLILRGRVPEGRALDSEVDPDPEGDLGVRG
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100.0%; Pred. No. 1.2e-218;
Live 0; Mismatches 0;
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ing a PRO polypeptides; (4) an
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                                                                                                                                                                                                                                                             Query Match
Best Local (
                                                                                                                                                                                                                                          Matches 410;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel isolated nucleic acid and the PRO polypeptide encoded by it. A protein of the invention has antiinflammatory, antiarthritic, antirheumatic, immunosuppressive, osteopathic, antidiabetic, dermatological, antipsoriatic, antiallergic, antiasthmatic, hepatotropic, and respiratory activity. A polynucleotide of the invention may have a use in gene therapy. The PRO polypeptide, it agonist, antagonist, or antibody that specifically binds to the polypeptide is useful for treating an immune related disorder such as
                                                                                                                                                                                                                                                                                                                        Sequence 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New PRO polypeptides and polynucleotides, useful for treating e.g. erythematosus, rheumatoid arthritis, diabetes mellitus, immune-mediated renal disease, or demyelinating diseases of the central or peripheral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nervous
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                                                                                                                                                                                                                                                             Local Similarity
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                    AVLASLLVLLALLLAALLYVKCRLNVLLWYQDAYGEVEINDGKLYDAYVSYSDCPEDRKF
                                                                                                    HYSLHEYSWVKANLSEVLVSSVLGVNVTSTEVYGAFTCSIQNISFSSFTLQRAGPTSHVA
                                                                                                                                                                                MPGVCDRAPDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGG
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                                                                           HYSLHEYSWVKANLSEVLVSSVLGVNVTSTEVYGAFTCSIQNISFSSFTLQRAGPTSHVA
                                                                                                                                                           MPGVCDRAPDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGG
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ilarity 100.0%;
Conservative 0
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Pred. No. 1.2e-218;
; Mismatches 0;
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17-AUG-1999;
31-AUG-1999;
01-SEP-1999;
15-SEP-1999;
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02-JUN-1999;
22-JUN-1999;
22-JUN-1999;
22-JUL-1999;
26-JUL-1999;
                                                      WPI; 2002-205567/26.
N-PSDB; ABK40277.
                                                                                                                                                   01-DEC-1999;
01-DEC-1999;
                                                                                                                                                                                                                                                                                     08-MAR-1999;
11-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                 Human; PRO; benign tumour; malignant tumour; lymphoid malignancy; leukaæmia; neuronal disorder; stromal disorder; blastocoelic disordamatory disorder; immune disorder; angiogenic disorder; cytc
                                                                                                     Ashkenazi
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                                                                                                                                                                                                                                                                                                                                                                                         neuroprotective.
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                                                                                                                       GENENTECH INC.
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                                                                                                                                         2000WO-US000219
                                                                                 Goddard
Pan J, F
Wood WI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                        polypeptide
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                                                                                                                                                 99US-0144758P
99US-0145629P
99US-0146222P
99US-0149395P
99US-0151689P
99WO-US0201111
99WO-US021190
99WO-US028301
99WO-US028301
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99US-0123972P
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99US-0140653P
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                                                                                          Godowski PJ,
RM, Roy MA,
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                                                                                           Gurney
Smith
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                                                                                           Hillan KJ;
Stone DM;
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                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic;
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Claim 61; Fig 48; 302pp; English

inflammatory, angiogenic and immunologic

five nucleic acids encoding PRO polypeptides, useful f or malignant tumors, leukemias and lymphoid malignanci matory, angiogenic and immunologic disorders.

for treating

X888888888XX

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ADJ37329
ID ADJ3
XX
AC ADJ1
AC ADJ1
AC ADJ2
AC ADJ2
AC ADJ3
AC ADJ37
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                            cytostatic; gene therapy; pRO; pRO197; pRO207; pRO226; pRO232; pRO243; pRO256; pRO269; pRO274; pRO304; pRO339; pRO1558; pRO779; pRO1185; pRO1745; pRO5775; pRO5713; pRO7168; pRO5725; pRO202; pRO206; pRO264; pRO313; pRO342; pRO542; pRO773; pRO0661; pRO1216; pRO1686; pRO1800; pRO362; pRO980; pRO4980; cancer; tumour; neoplastic cell growth; neoplastic cell proliferation; carcinoma; lymphoma; blastoma; sarcoma; leukaemia.
   31-AUG-1999;
                                                                           02-AUG-2002; 2002US-00211858
                                                                                                                                                          13-NOV-2003
                                                                                                                                                                                                                                     US2003211096-A1
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60; Conservative
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   99US-0151689P
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96.8%;
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Pred. No. 1.1e-189;
2; Mismatches 2;
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11-FEB-2000; 2000WO-US003565.
09-AUG-2001; 2001US-00927796.
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                                                                                                                                   (GETH ) GENENTECH INC
                                                                                                                    Pan J,
                                                                                                                         Goddard A, Godowski PJ,
Pan J, Pitti RM, Roy MA,
                                                                                                                         Gurney AL,
Smith V,
                                                                                                                          Stone DM;
                                                                                                                             Hillan KJ;
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New isolated PRO polypeptides, useful as targets for the diagnosis, prevention and treatment of cancers, e.g. lymphoma, blastoma, sarcc leukemia, and as predictors of the prognosis of tumor treatment. Barcoma or

Claim 61; SEQ ID NO 48; 307pp; English.

CC has at least least 180% maino acid sequence identity to: (1) any one of 15 fully certification, with or without its associated (designated PI-P35) given in the cextracellular domain of any one of the polypeptides of PI-P35, with or cextracellular domain of any one of the polypeptides of PI-P35, with or cextracellular domain of any one of the polypeptides of PI-P35, with or cextracellular domain of any one of the polypeptides of PI-P35, with or cextract of the DNA deposited under CC without its associated signal peptide; or (3) an amino acid sequence CC encoded by the full-length coding sequence (2) 2032 (2) 20396, 203379, 209387, 209786, 209482, 209490, 203312, 55820, 209596, 209379, 202397, 209786, 209482, 209490, 203312, 55820, 203096, 203155, 203465, 202379, 209387, 209786, 209379, 200787, 209786, 209482, 209482, 209397, 209383 or PTA-43; or CC pTA-255, pTA-618, pTA-545, pTA-545, pTA-545, pTA-545, 203383, 203661, 203835 or PTA-43; or CC pTA-255, pTA-618, pTA-545, The invention describes an isolated PRO polypeptide. The PRO polypeptide: has at least 80% amino acid sequence identity to: (1) any one of 35 fully the treatment of cancers.

Sequence 504 ₽,

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Best Local Similarity
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                                                                                                                                                                                             HYSLHEYSWVKANLSEVLVSSVLGVNVTSTEVYGAFTCSIQNISFSSFTLQRAGPTSHVA
KEVQLALPRKVRYRPVEGDPQTQLQDDKDPMLILRGRVPEGRALDSEVDPDPEGDLGVRG
                        VNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLIVVLSDAFLSRAWCSH
                                                                                               VNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLIVVLSDAFLSRAWCSH
                                                                                                                                      AVLASLLVLLALLLAALLYVKCRLNVLLWYQDAYGEVEINDGKLYDAYVSYSDCPEDRKF
                                                                                                                                                                                                                                                  MPGVCDRAPDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGG
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                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                     87.4%;
96.8%;
                                                                                                                                                                                                                                                                                                        2;
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Pred. No. 1.1e-189;
2; Mismatches 2;
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                                                                                                                                                                               The invention relates to an isolated antibody that binds to a PRO polypeptide. The methods and compositions of the present invention are useful for diagnosing, prognosticating and/or treating neoplastic tumours, such as lung, colon, breast, prostate, rectal, cervical and liver tumours. The PRO polypeptides are also useful as molecular weight markers, or for chromosome identification. The PRO genes are useful as hybridisation probes, or for screening libraries of Human CDNA, genomic DNA or mRNA. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The present sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                          Ashkenazi AJ,
Marsters SA,
Watanabe CK,
                                                                                                                                                                                                                                                                                                                   New isolated antibodies binding PRO polypeptides, useful for diagnosing, prognosticating and/or treating neoplastic tumors, such as lung, colon, breast, prostate, rectal, cervical and liver tumors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-AUG-1999; 99US-0151689P.
11-FEB-2000; 2000WO-US003565.
09-AUG-2001; 2001US-00927796.
                                                                                                                                                                 Sequence 504 AA;
                                                                                                                                                                                                                                                                                                 Claim 61; SEQ ID NO 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-AUG-2002; 2002US-00210951.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              neoplastic tumour; lung; colon; liver; gene therapy; Human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PRO polypeptide #24.
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DB; ADG68252.
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360; Conserv
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           AVLASLLVLLALLLAALLYVKCRLNVLLWYQDAYGEVEINDGKLYDAYVSYSDCPEDRKF
                                                     HYSLHEYSWVKANLSEVLVSSVLGVNVTSTEVYGAFTCSIQNISFSSFTLQRAGPTSHVA
                                                                                             MPGVCDRAPDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGG
                                                                                 MPGVCDRAPDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGG
                                         HYSLHEYSWVKANLSEVLVSSVLGVNVTSTEVYGAFTCSIQNISFSSFTLQRAGPTSHVA
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96.8%;
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                                                                                                                       Score 1876; DB 8;
Pred. No. 1.1e-189;
2; Mismatches 2;
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14-JUL-2000;
26-JUL-2000;
14-AUG-2000;
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16-MAR-2000;
17-MAR-2000;
18-APR-2000;
19-MAY-2000;
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KEVQLALPRKVRYRPVEGDPQTQLQDDKDPMLILRGRVPEGRALDSEVDPDPEGDLGVRG
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                                                                                                                                                 SFREGLCRLLELTRRPIFITFEGQRRDPAHPALRLLRQHRHLVTLLLWRPGSVTPSSDFW
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KEVQLALPRKVRYRPVEGDPQTQLQDDKDPMLILRGRVPEGRALDSEVDPDPEGDLGM--
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protein; 407 ጅ

transduction pathway protein, Seq ID 973.

immune system disorder; rheumatoid arthritis; inflammatory condition; organ transplant rejection; infection; hepatitis C; blood disorder; sickle cell anaemia; hyperproliferative disorder; Gaucher's disease; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; chromosomal abnormality; Down syndrome; ischaemia; renal disorder; cardiovascular; respiratory; wound healing; endocrine; Addison's disease; reproductive system; gastrointestinal; liver disorder; AIDS; Neuroprotective; cytostatic; dermatological; immunosuppressive; tumour; antiinflammatory; cancer; deficiency syndrome

17-JAN-2001; 2001WO-US001312 2000US-0119065P 2000US-0180628P 2000US-01806350P 2000US-0196350P 2000US-0199076P 2000US-0199076P 2000US-0199076P 2000US-0214886P 2000US-0216847P 2000US-0216840P 2000US-0216840P 2000US-0217496P 2000US-0217496P 2000US-0217496P 2000US-0217496P 2000US-0225214P 2000US-0225214P 2000US-0225214P 2000US-0225214P 2000US-0225266P 2000US-0225266P 2000US-0225266P 2000US-0225266P 2000US-0225266P

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1-SEP-2000;

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4-AUG-2000; 4-AUG-2000; 4-AUG-2000; 4-AUG-2000; 2-AUG-2000; 22-AUG-2000; 22-AUG-2000; 23-AUG-2000; 23-AUG-2000;

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The invention relates to novel isolated polypeptides (I), and CC polynucleotides (II). (I), (II) and the antibody to (I) are useful for CC disorders (e.g. congenital and acquired immunodeficiencies, autoimmune CC disorders (e.g. congenital and acquired immunodeficiencies, autoimmune CC transplant rejections and graft versus host disease, infectious diseases (e.g. hepatitis C), bleeding disorders, haemoglobin abnormalities and cother blood-related disorders (sickle cell anaemia), myeloproliferative disorders, primary haematopoietic disorders, hyperproliferative disorders (e.g. Gaucher's disease and cancer), neurodegenerative disorders (e.g. Gaucher's disease, Parkinson's disease), chromosomal abnormalities (CC plown syndrome), ischaemic injury (e.g. stroke), renal disorders (e.g. cepithelial cell proliferation, endocrine disorders (e.g. arrhythmia), cerdiovascular disorders (e.g. arrhythmia), cepithelial cell proliferation, endocrine disorders (e.g. Addison's disease), reproductive system disorders, gastrointestinal disorder (e.g. higher affinity antibodies, and as a means to induce tumour proliferation in pathologies e.g. acquired immune deficiency syndrome (AIDS). AMU17059-AMU17053 represent novel signal transduction pathway protein, amino acid sequences of the invention
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08-NOV-2000
08-NOV-2000
17-NOV-2000
17-NOV
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A;Status: preliminary
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues: 1-570 - GGRES
A;Cross-references: UNIPROT:Q61730; GB:X85999; NID:g887520; PIDN:CAA59991.1; PID:g88752
C;Superfamily: interleukin-1 receptor type I
C;Keywords: transmembrane protein

C;Accession: A57535
R;Greenfeder, S.A.; Nunes, P.; Kwee, L.; Labow, M.; Chizzonite, R.A.; Ju, G. J. Biol. Chem. 270, 13757-13765, 1995
A;Title: Molecular cloning and characterization o a second subunit of the interleukin A;Reference number: A57535; MUID:95293970; PMID:7775431
A;Accession: A57535

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intrleukin 1 receptor accessory protein precursor - mouse C;Species: Mus musculus (house mouse) C;Date: 08-Feb-1996 #sequence\_revision 08-Feb-1996 #text\_change 09-Jul-2004

## ALIGNMENTS

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A36187
A36187
interleukin-1 receptor type I precursor - human
C;Species: Homo sapiens (man)
C;Date: 14-Dec-1990 #sequence_revision 14-Dec-1990
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#text\_change 09-Jul-2004

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interleukin-1 receptor-related protein - hu
C;Species: Homo sapiens (man)
C;Date: 21-Dec-1996 #sequence_revision 06-J
C;Accession: G02426
R;Lovenberg, T.W.; Crowe, P.D.; Liu, C.; Ch
submitted to the EMBL Data Library, Februar
A;Reference number: H01239
A;Accession: G02426
A;Status: preliminary; translated from GB/E
A;Molecule type: mRNA
A;Residues: 1-562 <LOV>
A;Cross-references: EMBL:U49065; NID:g12360
C;Superfamily: interleukin-1 receptor type
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A; Residues: 1-569 <SIM>
A; Cross-reference
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A; Cross-references: EMBL:X16896; NID:g33800;
C; Genetics:
A; Gene: GDB:ILIR1; ILIRA; D251473; ILIR
A; Cross-references: GDB:125254; OMIM:147810
A; Map position: 2q12-2q12
C; Superfamily: interleukin-1 receptor type I
C; Keywords: cytokine receptor; transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Chua, A.O.; Gubler, U.
Nucleic Acids Res. 17, 10114, 1989
A;Title: Sequence of the cDNA for the human fibroblast type interleukin-1 receptor.
A;Reference number: S06928; MUID:90098789; PMID:2532321
A;Accession: S06928
A;Status: translation not shown
A;Molecule type: mRNA
A;Molecule type: mRNA
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Best Local S
Matches 85
                                                                        Cross-references: EMBL:U49065; NID:g1236078; PIDN:AAB53237.1; PID:g1236079
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 Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       324 YIQLIYPVTNFQKHMIGICVTLTVI--IVCSVFIYKIFKIDIVLWYRDSCYDFLPIKASD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 RAPDFLSPSEDQVLRPA------LGSSVALNCTAWVVSGPHCSLPSVQW----L
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23.7%;
9.5%;
28.5%;
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Pred. No. 1.6
Pred. No. 4.5e-09;
                                                                                                                                                                                     , C.; Chalmers,
February 1996
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                                                      type
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                                                                                                                              GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                     human
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               Length
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                                                                                                                                                                                                                                                                                                    280 DYOFVEHPSTKRKYTLITTLNISEVKSQFYRYPFICVVKNTNIFESAHVOLIYPVPDFKN
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                                                                                                                                                                                                                                                                                                                                        66 EYSWVK--ANLSEVLVSSVLGVNVTSTEVYG-AFTCSIQNIS-FSSFTLQRAGPTSHVAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     86;
                                                                                                                                                                                                                                                                                                                                                                                                              6 DRAPDFLSPSEDOVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGGHYSLH
                                 TLLLW-----RPGSVTPSSDFWKEVQLALPRKVR----YRPVEGDPQTQLQDDKDPM 331
 --ICWSGDFQERPQSA--KTRFWKNLRYQMPAQRRSPLSKHRLLTLDP---VRDTKEKL
                                                                          LVRDMGGFSWLGQSSEEQIAIYNALIQEGIKIVLLELEKIQDYEKMPDSIQFIKQ-KHGV
                                                                                                                                                    EGSFSDLD---TFVFKLLPEVLEGQFGYKLFIYGRDDYVGEDTIEVTNENVKKSRRLIII
                                                                                                                                                                                   --SYSDCPEDRKFVNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLIVV
                                                                                                                                                                                                                                                               VLASLIVIL--ALLLAALLYVKCRLNVLLWYQDA---YGEVEINDGKLYDAYV-----
                                                                                                                                                                                                                                                                                                                                                                             DR-PVILSP-RNETIEADPGSMIQLICN---VTGQFSDL--VYWKWNGSEIEWNDPFLAE
                                                                                                             LSDAFLSRAWCSHSFREGLCRLLELTRRPIFITF----
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388 LY---PKPHKESORHAVDALVLNÍLPEVLEROCGYKLFIFGRDEFPGQAVANVIDENVKL
                                                                                                                                                                                                                                                                                                                   112 RAGPTSHVAAVLASLLVLLALLLAAL-LYVKCRLNVLLWYQDAYGEVE-INDGKLYDAYV
                                                                                                                                                                                                                                                                                                                                                                                                                               57 GIGGHYSLHEYSWVKANLSEVLVSSVLGVNVTSTEV----YG-AFTCSIQNISFSSFTLQ
                                                                                                                                         CRRLIVVLSDAFLSRAWCSHSFREGLC---RLLELTRRPIFITFEGQRRDPAHP-ALRLL
                                                                                                                                                                                                                                                                                     LPAPDFR-AYLIGGLIALVAVAVSVVYIYNIFKIDIVLWYRSAFHSTETIVDGKLYDAYV
KOKHGAIR----WH-GDFTEQSQCMKTKFWKTVRYHMPPR-RCRP
                                          ROHRHLVTLLLWRPGSVTPSSD----FWKEVQLALPRKVRYRP
                                                                                          CRRLIVIVVPESLGFGLLKNLSEEQIAVYSALIQDGMKVILIELEKIEDYTVMPESIQYI
                                                                                                                                                                                                                                      SYSDCPEDRK-----FVNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNLSR
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Science 241, 585-589, 1988
A;Title: cDNA expression cloning of the IL-1 receptor, a member of the A;Reference number: A32604; MUID:88290679; PMID:2969618
A;Reference number: A32604
A;Recession: A32604
A;Molecule type: mRNA
A;Residues: 1-576 <SIM>
A;Residues: 1-576 <SIM>
A;Cross-references: UNIPROT:P13504; GB:M20658; GB:M29752; NID:g198300;
C;Superfamily: interleukin-1 receptor type I
C;Keywords: cytkine receptor; glycoprotein; phosphoprotein; transmembrane #status predicted <SIG>F;1-19/Domain: interleukin-1 receptor #status predicted <INT>F;339-359/Domain: transmembrane #status predicted <INT>F;46-99,145-199,251-315/Disulfide bonds: #status predicted interleukin-1 receptor precursor - mouse
C;Species: Mis musculus (house mouse)
C;Date: 31-Mar-1990 #sequence\_revision 31-Mar-1990 #text\_change 09-Jul-2004
C;Accession: A32604
R;Sims, J.E.; March, C.J.; Cosman, D.; Widmer, M.B.; MacDonald, H.R.; McMah
S.K. F;63,103,174,236,252,266,300/Binding site: carbohydrate h 8.9%; Score 190.5; DB 2; Similarity 24.0%; Pred. No. 6.3e-08; Conservative C.J.; Cosman, D.; Widmer, M.B.; MacDonald, H.R.; McMahan, 71; Mismatches 151; Indels Length 576; (Asn) (covalent) transmembrane 51; Gaps PIDN: AAA39279 immunoglobulin #status protein C.J.; predic

9

-EGQRRDPAHPALRLLRQHRHLV

283

456

399

169

339 121 65

279

515

567

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A;Gene: ST2

A;Map position: 1

C;Superfamily: interleukin-1 receptor type I

C;Keywords: glycoprotein

C;Keywords: glycoprotein

E;1-26/Domain: signal sequence #status predicted of F;27-337/Product: ST2 protein #status predicted of F;60,101,107,146,176,194,225,259,278/Binding site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A/Title: A putative protein of a growth specific cDNA from BAI A;Reference number: S07054; MUID:90092495; PMID:2532153
A;Accession: S07054
A;Molecule type: mRNA
A;Residues: 1-328, 'SKECPSHIA' <T02>
A;Crose-references: EMBL:Y07519; NID:g55517; PIDN:CAA68812.1; A;Note: it is uncertain whether Met-1, Met-7 or Met-19 is the C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Accession: A33541
A;Molecule type: mRNA
A;Residues: 1-191,'V',193-328,'SKECPSHIA' <KLE>
A;Cross-references: GB.M24843; NID:g201103; PIDN:AAA40160.1; PID:g201104
A;Cross-references: GB.M24843; NID:g201103; PIDN:AAA40160.1; PID:g201104
R;Tominaga, S.I.; Jenkins, N.A.; Gilbert, D.J.; Copeland, N.G.; Tetsuka, T.
Blochim. Blophys. Acta 1090, 1-8, 1991
Blochim. Blophys. Acta 1090, 1-8, 1991
A;Title: Molecular cloning of the murine ST2 gene. Characterization and chromosomal mapp
A;Reference number: S17657; MUID:91355215; PMID:1832015
A;Accession: S17657
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A;Molecule type: DNA
A;Residues: 1-191,'V',193-328,'SKECPSHIA' <TOM>
A;Cross-references: EMBL:X60184; NID:g54200; PIDN:CAA42742.1;
R;Tominaga, S.I.
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A;Title: Presence of a novel primary response gene ST2L, A;Reference number: 829498; MUID:93170492; PMID:7916701
A;Accession: $29498
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Proc. Natl. Acad. Sci. U.S.A. 86, 5708-5712, 1989
A;Title: Serum- and oncoprotein-mediated induction of a gene with sequence simi A;Reference number: A33541; MUID:89345536; PMID:2527364
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A, Residues: 1-567 < YAN>
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Best Local S
Matches 82
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|Species: 13-Jan-1995 #sequence revision 13-Jan-1995 #text_change 09-Jul-2004
|Accession: S29498; A31541; S17657; S07054
|Yanagisawa, K.; Takagi, T.; Tsukamoto, T.; Tetsuka, T.; Tominaga, S.
   396
                                                           172
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AAGTHSVEYFVHHTLPDVLENKCGYKLCIYGRDLLPGQDAATVVESSIQNSRRQVFVLAP
                                                                                                                                                                           AVLASLIVILIALLIAALLYVKC-RINVLLWYQDAYGEVEI-NDGKLYDAYVSY------
                                                                                                                                                                                                                                                                                                 WVKANLSEVI--VSSVLGV-NVTSTEV---YGAFTCSIQNISFSSFTLQRAGPTSH--VA
                                                                                                                                                                                                                                                                                                                                                                                                                    PDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGGHYSLHEYS
                                  -SDCPEDRKFVNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLIVVLSD
                                                                                                                      YIVAGCSLLLMFINVLVIVLKVFWIEVALFWRDIVTPYKTRNDGKLYDAYIIYPRVFRGS
                                                                                                                                                                                                                                         GRNESSSNDMDCLTSVLRITGVTEKDLSLEYDCLALNLHGMIRHTIRLRRKQPIDHRSIY
                                                                                                                                                                                                                                                                                                                                                            PVITNPPYNHTMEVEIGKPASIACSACFGKGSH-FLADVLWQINKTVVGNFGEARIQEEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301-304, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 189.5; DB 2
Pred. No. 7.4e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ST2L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               153;
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initiator
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C;Accession: A29943
R;Hashimoto, C.; Hudson, K.L.; Anderson,
Cell 52, 269-279, 1988
A;Title: The Toll gene of Drosophila, rec
A;Reference number: A29943; MUID:8813576C

Drosophila, required for dorsal-ventral 3; MUID:88135760; PMID:2449285

embryonic

polarity,

K. V.

#text\_change

09-Jul-2004

A; Accession: A29943

Molecule type:

RESULT 7
A29943
Toll protein precursor - fruit fly (Drosophila melanogaster)
C;Species: Drosophila melanogaster
C;Species: 19-Nov-1988 #sequence\_revision 19-Nov-1988 #text\_cha

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interleukin-1 receptor I precursor - chicken
C;Species: Gallus gallus (chicken)
C;Date: 17-Aug-1992 #sequence_revision 17-Aug-1992 #text_change 09-Jul-2004
C;Accession: JQ1526
C;Accession: JQ1526
R;Guida, S.; Heguy, A.; Melli, M.
Gene 111, 239-243, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gene 111, 239-243, 1992
A;Title: The chicken IL-1 receptor: differential evolution
A;Reference number: JQ1526; MUID:92175529; FMID:1531799
A;Accession: JQ1526
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JQ1526
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F;1-19/Domain: signal sequence #status predicted <SIG>
F;20-555/Product: interleukin-1 receptor I #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: mRNA
A; Residues: 1-555 < GUI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                 PIFITEGORRDPAHPALRLL-----ROHRHLVTLLLWRPGSVTPSSDFWKEVQLALPRK 310
                                                                              EKIHQSRRVIIILVPEPSCYGILEDASEKHL-
                                                                                                                                                            YDAYVLY---PKNRESCLYSSDIFALKILPEVLERQCGYNLFIFGRNDL-AGEAVIDVTD
                                                                                                                                                                                                                                             LEHPVQNIRGYLIGGGISLIFLLFLIL -- IVYKIFKIDIVLWYRSSCHPLLGKKVSDGKI
                                                                                                                                                                                                                                                                                   RAGPTSHVAAVI.----ASLLVLLALLLAAILLYVKCRLNVLLWYQDAYGEV----EINDGKL
                                                                                                                                                                                                                                                                                                                                                                    GLPLGIGGHYSLHEYSWVKANLSEVLVSSVLGVNVTSTEVYGAFTCSI-QNISFSSFTLQ 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                PDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLP----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IQGTIKWREDHVADKQSLSSKFWKHVRYQMP 541
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PESIKYVKQK----YGAIRWTGDFSERSH--
                                                                                                                    VNLSRCRRLIVVL----
                                                                                                                                                                                                   YDAYVSYSDCPEDRK-----
                                                                                                                                                                                                                                                                                                                            GMPHGIA-----VSGTKFNISEVKLKDY-----AYKFFCHFIYDSQEFTSY-IK
                                                                                                                                                                                                                                                                                                                                                                                                            PEFIYPN-NNTIEVELGSHVVMECN--VSSGVYGLLPYWQVNDEDVDSFDSTYREQFYEE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8.6%; Score 184; DB 2; 25.0%; Pred. No. 2.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65; Mismatches
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                                                                                                                                                                                                   FVNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLL-
                                                                                                                  SDAFLSRAWCSHSFREGL-CRLLELTR----R
                                                                              -AVYNALIQDGIKIILIELEKIEDYANM
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-SASTRFWKKVRYHMPSR 543
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interleukin 1 receptor type I - rat
C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change 29-Sep-1999
C;Accession: 156526
R;Hart, R.P.; Liu, C.; Shadiack, A.M.; McCormack, R.J.; Jonakait, G.M.
J. Neuroimmunol. 44, 49-56, 1993
A;Title: An mRNA homologous to interleukin-1 receptor type I is expressed in
A;Reference number: I56526; MUID:93266794; PMID:7684399
A;Scattus: preliminary; translated from GB/EMBL/DDBJ
A;Mclecule type: mRNA
A;Residues: 1-590 <RBS>
A;Cross-references: GB:M95578; NID:9451305; PIDN:AAA16196.1; PID:9451306
C;Superfamily: interleukin-1 receptor type I
C;Keywords: cytokine receptor
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C;Genetics:
A;Gene: F1yBase:T1
A;Gene: F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F1yBase:F
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Best Local S
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Best Local S
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RRLIVVLSDAFLSRAWCSHS-----FREGL-CRLLEL-----TRRPIFITFEG
                                                                                                                                                                                                                                                                                                                                            DYOFLEHPSAKRKYTLITT-LNVSEVKSOFYRYPFICFVKNTHILE--
                                                                                                                                                                                                                                                                                                                                                                                                         EYSWVK---ANLSEVLVSSVLGVNVTSTEVYG-AFTCSIQNISFSSFTLQRAGPTSHVAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DR-PVIMSP-RNETMEADPGSTIQLICN---VTGQFTDL--VYWKWNGSEIEWDDPILAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DRAPDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGGHYSLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALIKTALKGSTDDKLELIKP---SPVTPPLTT 1034
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FLSRAWCSHSFR--
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DCPEDRKFVNFILKPQLER-RRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLIVVLSDA
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                                                                                               YVLYPKTYGEGSFAYLDTFVFKLLPEVLEGQFGYKLFICGRDDYVGEDTIEVTNENVKRS
                                                                                                                                                      YVSYSDCPEDRKFV---NFILK--PQ-LERRRGYKLFLDDRDLLPRAEPSADLLVNLSRC
                                                                                                                                                                                                                      VYPVPDFKNYLIGGFAIFTATAVFCACIYKVFKVDIVLWYRDSCSDFLPRKASDGRTYDA
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                                                                                                                                                                                                                                                                            VLA-----SLLVLLALLLAALLYVKC-----RLNVLLWYQDAYGEV---EINDGKLYDA
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Pred. No. 2.3e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 168.5; DB 2;
Pred. No. 4.5e-06;
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RESULT 9
S42633
Fit-1M protein .
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A. Title: Alternative promoter usage of the A. Title: Alternative S42632; MUID:94178260;
                                                                                                                                                                                                                                                            A;Accession: T13887
A;Status: preliminary; translated
A;Nolecule type: mRNA
A;Residues: 1-1385 <CHI>
A;Cross-references: UNIPROT:Q24591
                                                                                                                                                                                                                                                                                                                                                                                                                      tlr protein - fruit fly (Drosophila melanogaster)
C;Species: Drosophila melanogaster
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-199
C;Accession: T13887
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C;Date: 25-Dec-1994 #sequence_revision 10-Nov-1995
C;Accession: S42633
                                                                                                                                                                                                                                                                                                                                                  R;Chiang, C.; Beachy, P.A.
Mech. Dev. 47, 225-239, 1994
A;Title: Expression of a novel Toll-like gene spans the parasegment
A;Reference number: Z17805; MUID:95151581; PMID:7848870
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A;Molecule type: mRNA
A;Residues: 1-247 <BEF
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Best Local
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1034 CEPRFEDAGKLYDAIILHSE--KDYEFVCRNIAAELEHGRPPFRLCIQQRDLPPQAS-HL
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                                                                                                    99 SIQNISFSSFTLQRAGPTSHVAAVLASLLVLLAALLLYVKCRLNVLLWYQDAYG---
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                                                                                                                                                       Similarity
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                               -EVEIND-GKLYDAYVSYSDCPEDRKFVNFILKPQLER-RRGYKLFLDDRDLLPRAEPSA
                                                                 ---LRQH-RHLVTL---LLWRPGSVTP----SSDFWKEVQLALPRKVRYRP
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                                                                                                                                                                                                                             FlyBase:FBgn0004364
                                                                                                                                                                                                                                                              UNIPROT: Q24591; EMBL: S76155;
                                                                                                                                                       6.7%;
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28.1%; Pred. No. 4.4e-06;
ative 39; Mismatches 95
                                                                                                                                     44;
                                                                                                                                                      Score 144.5; DB
Pred. No. 0.0014;
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                                                                                                                                                                      DB 2;
                                                                                                                                         104;
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C;Species: Rattus sp. (rat)
C;Species: Rattus sp. (rat)
C;Species: Rattus sp. (rat)
C;Accession: 12-Aug-1996 #tequence_revision 12-Aug-1996 #text_ch
C;Accession: T51903
R;Sutherland, D.B.; Varilek, G.W.; Neil, G.A.
Am. J. Physiol. 266, C1198-C1203, 1994
A;Title: Identification and characterization of the rat int
A;Reference number: 151903; MUID:94262728; PMID:8203483
A;Accession: 151903
A;Accession: 151903
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Refidues: 1-169 < RES>
A;Cross-references: GB:S70238; NID:9546976
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C;Gene(1Cs:
A;Gene: wheeler
A;Cross-references: FlyBase:FBgn0004364
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Title: The Drosophila 18 wheeler is required for morphogenesis and A;Reference number: Z17796; MUID:95324375; PMID:7600965 A;Accession: T13852
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66; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SDFWKEVQLALPRKV--RYRPVEGDPQTQLQDDKDPMLILRGRVP 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VLIIVFVFRESVRMWLFAHYGVRVCEPRFEDAGKLYDAIILHSE--KDYEFVCRNIAAEL 1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AALLYVKCRLNVLLWYQDAYG----EVBIND-GKLYDAYVSYSDCPEDRKFVNFILKPQL 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEVILVSSVIGVNVTSTEVYGAFTCSIQNISFSSFTLQRAGPTSHVAAVLASLLVLLALLL 134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SLRGLAQKLVIIEETSVSAEAEDVAELSPYLKSVPSNRLLTCDRY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ER-RRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLIVVLSDAFLSRAWCSHSFREGLCR 248
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                                                                                                                                                                                                                                                                                                                                                                                                             FWEKLRYAIPIELSPRGNNYTLDHHERFKQPVSPGMIFRQAPP
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R;Stark, K.L.; McMahon, J.A.; McMahon, A.P. Development 113, 641-651, 1991
A;Title: FGRP-4, a new member of the fibroblast growth i A;Reference number: S18209; MUID:92146274; PMID:1723680 A;Accession: S18209
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$18209
$18209
$Ibroblast growth factor receptor 4 precursor (clone N,Alternate names: tyrosine kinase Mpk-11
N,Contains: protein-tyrosine kinase (EC 2.7.1.112)
C;Species: Mus musculus (house mouse)
C;Date: 07-Oct-1994 #sequence revision 07-Oct-1994 #tc.;Accession: $18209; $26751; $30497
                                                                                                                                                                       F;162-223/Domain: immunoglobulin homology <IMM>
F;367-387/Domain: transmembrane #status predicted <IMM>
F;368-799/Domain: intracellular #status predicted <INM>
F;388-799/Domain: intracellular #status predicted <INM>
F;462-747/Domain: protein kinase homology <KIN>
F;470-478/Region: protein kinase ATP-binding motif
F;54-98,169-221,268-330/Disulfide bonds: #status predicted
F;500,517,609/Active site: Lys, Glu, Asp #status predicted
                                                                                                                                                                                                                                                                                                                                                                         A;Residues: 611-667 <GIL>
A;Residues: 611-667 <GIL>
A;Cross-references: EMBL:X57236; NID:g53187; PIDN:CAA40512.1; PID:g53188
A;Cross-references: EMBL:X57236; NID:g53187; PIDN:CAA40512.1; PID:g53188
A;Cross-references: ATP; duplication; glycoprotein; growth factor receptor; phosphotransferase; F;1-18/Domain: signal sequence #status predicted <SIG>
F;19-799/Product: fibroblast growth factor receptor 4 #status predicted <MAT>
F;19-366/Domain: extracellular #status predicted <EXT>
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A;Title: An Eph-related receptor protein tyrosine kinase gene segmentally expressed
A;Reference number: S30496; MUID:93096484; PMID:1281307
A;Accession: S30497
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Residues: 1-485,'QVVRAEAFG',486-799 <STA2>
A;Cross-references: EMBL:X59927; NID:g50968; PIDN:CAA42551.1; PID:g50969
R;Gilardi-Hebenstreit, P. Nieto, M.A.; Frain, M.; Mattei, M.G.; Chesties
Oncogene 7, 2499-2506, 1992
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A;Residues: 1-799 <STAl>
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                                                                 103;
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     24 LGSSVALNCTAWVVSGPHCSLPSVQWLK----DGLPLGIGGHYSLHEYSWVKANLSEVLV 79
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                                                                 Conservative
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                                                                                         5.7%; Score 123; DB 2
22.1%; Pred. No. 0.044;
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VGSDVELLCKVYSDAQPH----IQWLKHVVINGSSFGADGFPYVQVLKTTDINISEV--

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R;Hultmark, D.
Biochem. Biophys. Res. C
A;Title: Macrophage diff
A;Reference number: JC22
A;Contents: annotation
Toll protein-like receptor DKFZp54710610.1 - human ()Species: Homo sapiens (man) ()Species: Homo sapiens (man) ()Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004 ()Accession: T08664 ()Accession: T08664 ()Accession: T08664 ()Accession: T08664 ()Accession: T08664 ()Accession: T08664 ()Accession: T08664
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$11226
$11226
MyD88 protein - mouse
(c)Species: Mus musculus (house mouse)
C;Species: Mus musculus (house mouse)
C;Species: Mus musculus (house mouse)
C;Accession: $11226; UC2079
C;Accession: $11226; UC2079
R;Lord, K.A.; Hoffman-Liebermann, B.; Liebermann, D.A.
Oncogene 5, 1095-1097, 1990
A;Title: Nucleotide sequence and expression of a cDNA encoding MyD88, a nove A;Reference number: $11226; MUID:90326414; PMID:2374694
A;Accession: $11226
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A; Residues: 1-243 <LOR>
A; Cross-references: EMB
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Best Local S
Matches 33
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Title: Macrophage differentiation marker MyD88 is a member of the Toll/IL-1 receptor. Reference number: JC2079; MUID:94168566; PMID:8123006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cross-references: EMBL:X51397; NID:g53293; PIDN:CAA35762.1; PID:g53294
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                                                                                                                                                                                                                                                                                                                                                                                              163 KLYDAYVSYSDCPEDRKFVNFILKPQLERRRGYKLFLDDRDLLPRA---EPSADLLVNLS
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                                                                                                                                                                                                                                                                                                                                                                                                                                      5.4%; Score 115; DB 2; Length 243; 29.2%; Pred. No. 0.046; tive 26; Mismatches 38; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ----ALRLLRQHRHLVTLLLWRPGSVTPSSDFWKEVQLALPRKV
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A; Molecule type: mRNA
A; Residues: 1-786 < POLY
A; Cross-references: UNIPROT:Q15399; EMBL:AL050262
A; Experimental source: fetal brain; clone DKFZp54710610
C; Genetics:
A; Note: DKFZp54710610.1
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                                                             750
                                                                                                                         695 FYLSPNFYQSEWCHYELYFAHHNLFHEGSNSLILILLEPI----PQYSIPSSYHKLKSL
                                                                                                                                                      226 VVLSDAFLSRAWCSHS-----FREGLCRLLELTRRPIFITFEGQRRDP-AHPALRLL
                                                                                                                                                                                   638 HAFISYSG--HDSFWVKNELLPNLE-KEGMOICLHERNFVPGKSIVENIITCIEKSYKSI
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                                                                                                                                                                                                                                                                                119 VAAVLASLLVLLALLLAALLYVKCRLNVLLWYQDAYGE------
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Maximum Match 100%
Listing first 45 summaries
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O6uxi3 homo sapien
O9j1z8 mus musculu
O9np60 h x-linked
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P59823 mus musculu
P59823 homo sapien
P60029 pan troglod
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InterPro; IPR007110; Ig-like.
InterPro; IPR004075; IL1_receptor1.
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| 32 202 9.4 556 1 IRLI 33 196.5 9.2 1152 2 Q8W 35 196.5 9.2 1152 2 Q8W 36 196.5 9.2 1152 2 Q9W 37 191.5 8.9 573 2 Q8CG 38 190.5 8.9 573 2 Q8CG 38 190.5 8.9 573 2 Q8CG 39 190.5 8.9 576 1 ILLI 40 189.5 8.8 599 2 098X 41 189.5 8.6 1356 2 Q8W 42 185 8.6 1356 2 Q8W 43 184 8.6 555 2 Q8W 43 184 8.6 555 2 Q8W 43 183 8.5 571 2 RELIMINARY; 43 183 8.5 571 2 RELIMINARY; 44 183.5 8.5 571 2 RELIMINARY; 45 183 8.5 571 2 RELIMINARY; 46 183.5 8.5 571 2 RELIMINARY; 47 184 8.6 555 2 Q8W 48 184 8.6 555 2 Q8W 49 184 8.6 555 2 Q8W 49 184 8.6 555 2 Q8W 40 184 8.6 555 2 Q8W 41 183.5 8.5 571 2 RELIMINARY; 41 183.5 8.5 571 2 RELIMINARY; 42 185 8.6 1356 2 Q8W 43 184 8.6 1356 2 Q8W 44 183.5 8.5 571 2 RELIMINARY; 43 183 8.5 571 2 RELIMINARY; 44 183.5 8.5 571 2 RELIMINARY; 45 183 8.5 571 2 RELIMINARY; 46 183 8.5 571 2 RELIMINARY; 47 185 8.6 1356 2 Q8W 43 184 8.6 1356 2 Q8W 44 183.5 8.5 571 2 RELIMINARY; 48 183 8.5 571 2 RELIMINARY; 49 185 8.6 1356 2 Q8W 44 183.5 8.5 571 2 RELIMINARY; 48 185 8.6 1356 2 Q8W 45 185 8.6 1356 2 Q8W 46 185 8.6 1356 2 Q8W 47 185 8.6 1356 2 Q8W 48 185 8.6 136 2 Q8W 48 185 |              |                  |                        |                 |               |           |  |                  |             |
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| 33 197 9.2 1058 2 075FN7 CONTROLLED ALIGNMENTS  35 196.5 9.2 11152 2 08FRES  36 196.5 9.2 11152 2 08FRES  37 191.5 8.9 9.7 132 08C6P3  38 190.5 8.9 573 2 08C6P3  39 190.5 8.9 573 2 08C6P3  30 190.5 8.9 573 2 08C6P3  30 190.5 8.9 576 1 ILLR_MOUSE  91473  40 189.5 8.8 597 1 IRLL_MOUSE  91473  41 189.8 8.8 597 2 095256  42 185.5 8.5 575 2 090874  44 183.5 8.5 571 2 086PN4  45 183 8.5 571 2 086PN4  46 183 5 5 566 1 IRLI_RAT  47 185 184 2 184 |              | 32               | 202                    |                 | (J)           |           |  | Q01638           | homo sapien |
|  |              | u<br>u<br>u      | 197                    |                 | 305           |           |  | Q76fn7           | tachypleus  |
| 36 196.5 9.2 1346 2 09W477 37 191.5 8.9 573 2 08C623 38 190.5 8.9 573 2 08C623 39 190.5 8.9 573 2 08C623 39 190.5 8.9 576 1 IRLIR MOUSE 40 189.5 8.8 567 1 IRLIR MOUSE 41 189 8.8 599 2 095256 42 185 8.6 1356 2 09WR22 43 184 8.6 555 2 09WR22 44 183.5 8.5 571 2 08DR74 44 183.5 8.5 571 2 08DR74 44 183.5 8.5 571 2 08DR74 45 1873 09H733 PRELIMINARY; PRT; 410 AA. 09H733 PRT; 410 AA. 09H734 PRT; 410 AA. 09H734 PRT; 410 AA. 09H734 PRT; 410 AA. 09H734 PRT; 410 AA. 09H |              | . 55             | 196.5                  |                 | 15            |           |  | Q7pfc4           | anopheles g |
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| ALIGNMENTS  ALIGNM |              | <u>4</u> د       | 185                    | •               | nυ            |           |  | Q8wre2           | anopheles g |
| ALIGNMENTS  ALIGNM |              | 44.              | 183.5                  |                 | 7 4           |           |  | 08qfn4           | salmo salar |
| SULT 1  1933  OPHT33  OPHT34  OPHT33  OPHT33  OPHT33  OPHT34  OPHT33  OPHT34  OPHT33  OPHT34  OPHT33  OPHT34  OPHT34  OPHT34  OPHT34  OPHT33  OPHT35  OPHT35  OPHT36  OPHT37  OPHT38   |              | .45              | 183                    |                 | σ.            |           |  | Q62611           | rattus norv |
| OSHT33 PRELIMINARY; PRT; 410 AA. OSHT33; OSHT33; PRELIMINARY; PRT; 410 AA. OSHT33; OSHT33; OSTARA-2001 (TrEMBLrel. 16, Last sequence update) 10MAR-2001 (TrEMBLrel. 28, Last annotation update) 25-OCT-2004 (TrEMBLrel. 28, Last annotation update) 25-OCT-2004 (TrEMBLrel. 28, Last annotation update) 25-OCT-2004 (TrEMBLrel. 28, Last annotation update) 14-Prothetical protein FLJ21446 (SIGIRR protein) 15-OCT-2004 (TrEMBLrel. 28, Last annotation update) 16-OCT-2004 (TrEMBLrel. 28, Last annotation update) 17-OCT-2004 (TrEMBLrel. 28, Last annotation update) 18-OCT-2004 (TrEMBLrel. 28, Last annotation update) 19-OCT-2004 (TrEMBLrel. 28, Last annotation update) 19-OCT-2004 (TrEMBLrel. 28, Last annotation update) 19-OCT-2004 (TrEMBLrel. 28, Last annotation update) 10-OCT-2004 (TrEMBLrel. 28, Last annotation update) 10-OCT-2004 (TrEMBLrel. 28, Last annotation update) 11-Independent update) 11-Indepen   |              |                  |                        |                 |               |           | ALIGNMENTS   |                  |             |
| OSHIT 1  OSHIT3; OSHIT |              |                  |                        |                 |               |           |  |                  |             |
| OHY733 PRELIMINARY; PRT; 410 AA. OHY733 OL-MAR-2001 (TTEMBLICEL 16, Created) OL-MAR-2001 (TTEMBLICEL 28, Last annotation update) OL-MAR-2001 (TTEMBLICEL 28, Last annotation update) DL-MAR-2001 (TTEMBLICEL 28, Last annotation update) Phypothetical protein FLJ21446 (SIGIRR protein). Hypothetical Proman Y. Hobara FLJ24626 (SIGIRR protein). Hypothetical Proman Y. Hypothetical Proman | RESU<br>Q9H7 | 1<br>1<br>1<br>1 |                        |                 |               |           |  |                  |             |
| Ol-MAR-2001 (TrEMBLrel. 16, Created) Ol-MAR-2001 (TrEMBLrel. 18, Last sequence update) 25-OCT-2004 (TrEMBLrel. 28, Last annotation update) 25-OCT-2004 (TrEMBLrel. 28, Last annotation update) Hypothetical protein FLJ21446 (SIGIRR protein). Homo sapiens (Human). Enkaryota, Metazoa; Chordata; Craniata; Vertebrata; Enteleostomi; Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Naihi T., Shibahara T. TISSUE-Colon; Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamot Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara T. Trankara T., Nakamura Y., Isogai T., Sugano S.; SEQUENCE FROM N.A. TISSUE-Lung; Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.  12  | SE           | Q9H7             | 3 33                   |                 |               |           | , 410  |                  |             |
| 01-MAR-2001 (TREMBLEEL 16, Last sequence update) 25-OCT-2004 (TREMBLEEL 28, Last annotation update) 15-OCT-2004 (TREMBLEEL 28, Last annotation update) Hypothetical protein FLJ21446 (SIGIRR protein). Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Homo sapiens (Human). Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. NCBI_TaxID=9606; [1] Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamot Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara T TISSUB-Colon; Kawabata A., Hikiji T., Kobatake N., Inagaki H., Nishi T., Shibahara T TISSUB-Colon; SEQUENCE FROM N.A. TISSUB-Lung; MEDLINE=2388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K., PSISUB-Lung; MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K., PSISUB-Lung; MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K., PSISUB-Lung; MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K., PSISUB-Lung; MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K., PSISUB-Lung; Schaefer S.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K., PSISUB-Lung; Schaefer S.D., Wagner D.N., Scheefer G.J., Abramson R.D., Mullahy S.S., Lachards S., Worley K.C., Hale S., Garcia A.M., Rodrigues S., Sanchez Whiting M., Wadan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodrigues A.C., Grimwood J., Schmutz J., Wyers R.M., Butterfield N.S., Machana R.D., Rodrigues S., Sanchez Whiting M., Wagner M., Schwer M., Schwer R.D., Schwer R.M., Schwer R.D., | 3 2          | M-10             | 33;<br>AR-2001         | (Trembl         |               | •         | Created)   |                  |             |
| Hypothetical protein FLJ21446 (SIGIRR protein) Hypothetical protein FLJ21446 (SIGIRR protein) Homo sapiens (Human) Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo. NCBI TaxID=9606; [1]  SEQUENCE FROM N.A. TISSUE-Colon; Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamot Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara T. Tanaka T., Nakamura Y., Isogai T., Sugano S.; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G. Klausner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S. I., Wang J., Haich F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheefe Z. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S. Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Guaratne P. H Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulky Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Glabs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Shosak S.A., NcEwan P.J., McKernan K.J., Malek J.A., Guaratne P. H Richards S., Jonguellano N.A., Peters G.J., Abramson R.D., Mullahy S. Bosak S.A., NcEwan P.J., McKernan K.J., Malek J.A., Guaratne P. H Richards S., Wannay D.M., Sodergren E.J., Lu X., Glabs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. Go, Go: Olotoka Sci. U.S.A. 99:16899-16903 (2002).  13] Spourse CDNA sequences.", Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).  14] Go, Go: Olotoka BB, Fitzansmembrane receptor activity; IEA.  | Ŋ            | 01-8             | AR-2001                | (TrEMBL         |               | •         | nce update)  |                  |             |
| Homo Bapiens (Human).  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutheleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  MCBI_TaxID=9606;  [1] FaxID=9606;  [1] SEQUENCE FROM N.A.  TISSUB=COlon;  Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamot Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara T. Rahaka T., Nakamura Y., Isogai T., Sugano S.;  Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.  [2] Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,  YISSUB=Lung;  MEDLINE=2238857; PubMed=12477932; DOI=10.1073/pnas.242603899;  SETARAS T., Nakamura Y., Isogai T., Shemmen C.M., Schuler G.D., Altschul S.F., Zeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,  YISSUB-Lung;  MEDLINE=2238857; PubMed=12477932; DOI=10.1073/pnas.242603899;  MEDLINE=238857; PubMed=12477932; DOI=10.1073/pnas.242603899;  SEQUENCE FROM N.A.  TISSUB-Ling;  MEDLINE=238857; PubMed=12477932; DOI=10.1073/pnas.242603899;  SEQUENCE FROM N.A.  TISSUB-Ling;  Strausberg R.L., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D., Altschul S.F., Cardin H., Woore T., Wax S.I., Wang J., Heiter F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Scheetz T. Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.  Sepak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P. H. Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S., Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakeley R.M., Touchman J.M., Green E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Rodrigues S., Sanchez M.S., Schein J., Wartan M.A.; "Green E.J., Lu X., Gibbs R.A., Touchman J.M., Green E.J., Lu X., Gibbs R.A., Schein J., Wartan M.A.; "Green E.J., Lu X., Gibbs R.A. | ב<br>ב       | HVD0             | thetical               | Orotei          |               | ٠.        | Last annotation update<br>6 (SIGIRR protein).  |                  |             |
| Mammalla, Butheria, Primates; Catarrhini; Hominidae; Homo.  NCBI TaxID=9606; [1] —  SEQUENCE FROM N.A.  TISSUE=Colon;  Kawabara A., Hkiji T., Kobatake N., Inagaki H., Ikema Y., Okamot Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara T. Tanaka T., Nakamura Y., Isogai T., Sugano S.;  Submitted (AuG-2000) to the EMBL/GenBank/DBJ databases.  SEQUENCE FROM N.A.  TISSUE=Lung;  SEQUENCE FROM N.A.  TISSUE=Lung;  MEDIINB=22388257; PubMed=12477932; DDI=10.1073/pnas.242603899;  SETAUBBETG R.L., Feingold E.A., Grouse L.H., Derge J.G.,  Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.  Altechul S.F., Zeeberg B., Buetow K.H., Schaefar C.F., Bhat N.K.,  Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heiseh F.,  Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,  Staplecon M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.  Brownstein M.J., Usdain T.B., Toshiyuki S., Carninci P., Prange C.  Raha S.S., Loquellano N.A., Peters G.J., Abramon R.D., Mullahy S.  Boosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.  Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.  Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,  Rahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,  Blakesley R. M., Touchman J.W., Green B.D., Dickson M.C.,  Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.  Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences.";  Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  SMBL; AKO2509; BAB15066.1;  EMBL; BC025953; ANIZ5953.1;  GO; GO:000488; F:transmembrane receptor activity; IEA.  |              | Homo             | sapiens                | (Human          | ,             | ľ         | The state of the s |                  |             |
| [1]TaxID=9606; [1]SEQUENCE FROM N.A.  TISSUB=ICOLON;  Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamot Kawabata A., Hikiji T., Suzuki Y., Obayashi M., Nishi T., Shibahara T. Makamura Y., Isogai T., Sugano S.;  Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.  [2]  SEQUENCE FROM N.A.  TISSUB-Lung;  MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;  Strausberg R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.  Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Particular R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.  Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusaina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T. B., Toshiyaki S., Carninci P., Prange C.  Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.  Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.  Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S., Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Butterfield Krzywinski M.I., Skalska U., Smailus D.B., Schmerch A., Schein J. Jones S.J., Marra M.A.;  "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences.";  Proc. Natl Acad. Sci. U.S.A. 99:16899-16903(2002).  SEQUENCE FROM N.A.  TISSUB-Lung;  Strausberg R.;  Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.  SMBL; AK02509; BAB15066.1;  - SMBL; AK02509; BAB15066.1;  - Go; GO:000488; F:transmembrane receptor activity; IEA.  |              | Mamm             | alia; Eut              | 90 9            | Prim          | ב פ       | ; Catarrhini; Hominidae;   | iomo.            | ,           |
| TISSUE=Colon; Ray Colon; Kobatake N., Inagaki H., Ikema Y., Okamot TISSUE=Colon; Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamot Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara T Tanaka T., Nakamura Y., Isogai T., Sugano S.; Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.  [2]  SEQUENCE FROM N.A.  TISSUE=Lung; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Schuler G.D., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Altechul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stagleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T. Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S., Mahas S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S., Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Stales R.D., Dickson M.G., Stales R.D., Dickson M.G., Schein J. Jones S.J., Marra M.A.;  "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences.";  Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  SEQUENCE FROM N.A.  TISSUE=Lung;  SLEMBL; AKO25099; BAB15066.1; -  EMBL; AKO25099; BAB15066.1; -   |              | (1)              | _TaxID=96              | ;06;            |               |           |  |                  |             |
| Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamot Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara T Tanaka T., Nakamura Y., Isogai T., Sugano S.; Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.  [2]  SBQUENCE FROM N.A.  TISSUB=Lung;  MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Peingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D. Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T. Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S., Washa S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S., Soarcis A.M., Gay L.J., Hulyk S., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Faha S.S., Loquellano N.A., Pales S., Garcia A.M., Gay L.J., Hulyk S., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.M., Touchman J.W., Green E.D., Dickson M.C., Blakesley R.M., Touchman J.W., Green E.D., Dickson M.C., Shein J., Jones S.J., Marra M.A.;  "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences.";  "Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.  EMBL; AK025099; BAB15066.1; -  EMBL; AK025099; BAB15066.1; -  EMBL; AK025099; BAB15066.1; -  EMBL; GO:0004888; F:transmembrane receptor activity; IEA.   |              | SEQU             | ENCE FROM              | N.A.            |               |           |  |                  |             |
| Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara Tanaka T., Nakamura Y., Isogai T., Sugano S.; Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases. [2] SEQUENCE FROM N.A. TISSUE=Lung; MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D. Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Helter F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T. Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S. Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S. Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Mitting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK025093; BAB15066.1; - EMBL; BC025953, AAR25953.1; - EMGL; BC025953, AAR25953.1; - EMGL; BC025953, AR25953.1; - EMGL; BC025953, AR25953.1; - EMGL; BC0259553, AR25954.1  |              | Kawa             | bata A.,               | Ů.              | ;             | (Oba      | atake N., Inagaki H., Ikema  | ×                | ö           |
| Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.  [2] SEQUENCE FROM N.A. TISSUB-Lung; MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D. Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsich F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T. Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S. Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P. H. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S. Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; "J. Warra M.A.; Schmitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK02509; BAB15066.1; - EMBL; AK02509; BAB15066.1; - EMBL; BC025953, AAR25953.1, - EMGL; GO:0004888; F:transmembrane receptor activity; IEA.  | ₽ 3          | Tana             | ka T., Na              | ikamura         | Y.,           | 1800      | r., Obayashi m., Nishi T.,<br>yai T., Sugano S.;   | Shipana          |             |
| SEQUENCE FROM N.A.  TISSUB=Lung; MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Schuler G.D. Altschul S.F., Zeeberg B., Buetow K.H., Schaeter C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsich F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T. Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S. Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S. Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Bodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; "Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  13] SEQUENCE FROM N.A. TISSUE=Lung; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK02509; BAB15066.1; - EMBL; BC025953, AAH25953.1; - EMGC, CO:0004888; F:transmembrane receptor activity; IEA.  | R P          | Subm             | itted (A               | JG-2000         | to            | the       | EMBL/GenBank/DDBJ database   |                  |             |
| MEDLINE=Z0388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Schaefer C.M., Schuler G.D. Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh P., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T. Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S. Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P. H. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S. Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences.";  proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  [3] SEQUENCE FROM N.A.  TISSUE=Lung; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK02509; BAB15066.1; - EMBL; AK025953, AAH25953.1; - EMGL; CO:0004888; F:transmembrane receptor activity; IEA.  | RP           | OBSE             | ENCE FROM              | N.A.            |               |           |  |                  |             |
| Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Schaefer C.M., Schuler G.D. Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.M., Schuler G.D. Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T. Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S. Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S. Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  [3] SEQUENCE FROM N.A. TISSUE=Lung; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK02509; BAB15066.1; - EMBL; BC025953, AAH25953.1; - EMGL; BC025953, Fitransmembrane receptor activity; IEA.  | 2 R          | TISS             | UE=Lung;               | 2007            |               | ,         | 77833 . DOI - 10 1073 /5555 34   | •                |             |
| Klausener R.D., Colling F.S., Wagner L., Schamen C.M., Schuler G.D. Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T. Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S. Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S. Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Fahey J., Holton E., Ketteman M., Madan A., Rodrigues S., Sanchez Fahey J., Holton E., Ketteman M., Madan A., Rodrigues S., Sanchez Fahey J., Holton E., Ketteman M., Madan A., Rodrigues S., Sanchez Fahey J., Holton E., Ketteman M., Madan A., Rodrigues S., Sanchez Fahes J., J., J., J., Maran M., Schein J.,   | ₽ ₹          | Stra             | usberg R.              | L., Fe          | ingol         | ±124      | ://932; DOI=10.1073/pnas.24<br>.A., Grouse L.H., Derge J.G   | · ·              |             |
| Hopkins R. F., Zerberg B., Buetow K.H., Schmeter C.F., Brit N.K., Parmer A.A., Rubin G.M., Hsich F., Diarchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Fahey J., Hulyk S Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Patering M., Madan A., Voung A.C., Shevchenko Y., Bouffard G.G., Bodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences.";  [3] SEQUENCE FROM N.A. TISSUE=Lung; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK025099; BAB15066.1; - EMBL; AK025953, AAH25953.1; - GO; GO:0004888; F:transmembrane receptor activity; IEA.  | 2 ₽          | Klau             | sner R.D.              | , 0011          | ins F         |           | Wagner L., Shenmen C.M.,   | m                | ٠ <u>.</u>  |
| Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T. Brownstein M.J., Usdin T.B., Toshiyuki S., Casninci P., Prange C. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S. Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S. Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences.";  "Generation and initial analysis of more than 15,000 full-length proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  [3]  SEQUENCE FROM N.A.  TISSUE-Lung; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.  EMBL; AK02509; BAB15066.1; - EMBL; BC025953, AAH25953.1; - EMBL; BC025953, AAH25953.1; - EMBL; BC025953, Fitransmembrane receptor activity; IEA.   | ጅ ጅ          | Hopk             | ins R.F.               | Jorda           | n H. B        | χ;<br>0 π | ore T., Max S.I., Wang J.,   |                  | • .~        |
| Brownstein M.J. Usdin T.B., Toshiyuki S., Carninci P., Prange C.  Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S. Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S. Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002). [3] SEQUENCE FROM N.A. TISSUE-Lung; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK025099; BAB15066.1; EMBL; AK025953, AAH25953.1; GO; GO:0004888; F:transmembrane receptor activity; IEA.  | R<br>A       | Diat             | chenko L               | , Maru          | sina l        |           | Farmer A.A., Rubin G.M., H   | long L.,         | 3           |
| Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences.";  "Goren S.J., Marra M.A.;  "Schein J. Schusse CDNA sequences.";  Strausberg R.;  Strausberg R.;  Strausberg R.;  Strausberg R.;  Strausberg R.;  Strausberg R.;  Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.  EMBL; AK02509; BAB15066.1; -  EMBL; BC025953, AAH2593.1; -  GO; GO:0004888; F:transmembrane receptor activity; IEA.  | <b>ያ</b> ያ   | Brow             | nstein M.              | J. Us           | din ∃         |           | Toshiyuki S., Carninci P.  | , Schee          | : :         |
| Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Glbbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalaka U., Smailus D.E., Schmerch A., Schein J. Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  [3] SEQUENCE FROM N.A. TISSUE-Lung; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK02509; BAB15066.1; EMBL; AK02599; BAB15066.1; EMBL; BC025953, AAH2593.1; EMBL; BC025953, AAH2593.1; EMBL; BC025953, Fitransmembrane receptor activity; IEA.  | R R          | Raha             | S.S., Lo               | quella<br>CEwan | no N.J        | ξ.<br>Σ.  | Peters G.J., Abramson R.D.   | , Mulla          | : .<br>:    |
| Villaion D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs K.A., Fahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  [3] SEQUENCE FROM N.A. TISSUE-Lung; Strausberg R.; Submitted (MARR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK025099; BAB15066.1; EMBL; BC025953; AAH25953.1; EMBL; BC025953; AAH25953.1; GO; GO:0004888; F:transmembrane receptor activity; IEA.   | ξ.           | Rich             | ards S.,               | Worley          | K<br>C        | На        | ale S., Garcia A.M., Gay L.  | J., Hul          | S           |
| Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  [3] Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  [3] SEQUENCE FROM N.A. TISSUE=Lung; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.  EMBL; AK02509; BAB15066.1; EMBL; BC025953; AAH25953.1; EMBL; BC025953; AAH25953.1; GO; GO:0004888; F:transmembrane receptor activity; IEA.   | ጅ ጅ          | Vill<br>Fahe     | alon D.K.<br>y J., Hel | ton E           | y D.M         | cema      | 30dergren E.J., Lu X., Gibb<br>an M., Madan A., Rodriques  | S., San          | N<br>≯      |
| Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J. Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002). [3] SEQUENCE FROM N.A. TISSUE=Lung; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK025099; BAB15066.1; EMBL; BC025953; AAH25953.1; GO; GO:0004888; F:transmembrane receptor activity; IEA.  | R<br>R       | Whit             | ing M., N              | fadan A         | chman<br>You  | Į.        | A.C., Shevchenko Y., Bouff   | ard G.G          |             |
| Krzywinski M.I., Skalaka U., Smailus D.E., Schnerch A., Schein J. Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002). [3] SEQUENCE FROM N.A. TISSUE-Lung; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK025099; BAB15066.1; EMBL; BC025953; AAM25953.1; EMBL; BC025953; AAM25953.1; EMBL; BC005953; AAM25953.1; EMBL; BC005953; AAM25953.1; EMBL; BC005953; C:membrane; IEA. GO; GO:0004888; F:transmembrane receptor activity; IEA.  |              | Rodr             | iguez A.C              | Gri             | mwood         | G (       | chmutz J., My  | T f              | ld Y.S      |
| "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002). [3] SEQUENCE FROM N.A. TISSUE-Lung; Strausberg R.; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AK025099; BAB15066.1; EMBL; BC025953; AAM25953.1; EMBL; BC025953; AAM25953.1; GO; GO:0004888; F:transmembrane receptor activity; IEA. GO; GO:0004888; F:transmembrane receptor activity; IEA.  |              | Jone             | winski M.              | farra M         | aleka         | .,        | Smailus D.E., Schnerch   | Sche             | ٠.<br>8     |
| and mouse CDMA sequences."; [3] Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002). [3] SEQUENCE FROM N.A. TISSUE-Lung; Strausberg R.; Strausberg R.; Strausberg R.; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases EMBL; AK025099; BAB15066.1; EMBL; BC025953; AAH25953.1; EMBL; BC025953; AAH25953.1; GO; GO:0016020; C:membrane; IEA. GO; GO:0004888; F:transmembrane receptor activity; IEA.   | RT           | "Gen             | eration a              |                 |               | nal       | s of more than 15,000 f  | ull-             | ቷ           |
| [3] SEQUENCE FROM N.A. SEQUENCE FROM N.A. TISSUE-Lung; Strausberg R.; Strausberg R.; Strausberg B.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases EMBL; AK025099; BAB15066.1; - EMBL; BC025953; AAH25953.1; - EMGC; GO:0016020; C:membrane; IEA. GO; GO:0004888; F:transmembrane receptor activity; IEA.   | <u> </u>     | Proc             | ∷ "                    |                 | ences<br>ci U | ທຸ.       | 99:16899-16  |                  |             |
| TISSUE-Lung; Strausberg R.; Strausberg R.; Strausberg R.; Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases EMBL; AK025099; BAB15066.1; EMBL; BC025953; AAH25953.1; GO; GO:0016020; C:membrane; IEA. GO; GO:0004888; F:transmembrane receptor activity; IEA.  | 28           | [3]              | 1                      | :               |               |           | :  |                  |             |
| Strausberg R.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases EMBL; AK025099; BAB15066.1; EMBL; BC025953; AAH25953.1; GO; GO:0016020; C:membrane; IEA. GO; GO:0004888; F:transmembrane receptor activity; IEA.  | מא           | SSIL             |                        | 2               |               |           |  |                  |             |
| EMBL; AK025099; BAB15066.1; EMBL; BC025993; BAB15965.1; EMBL; BC025953; AAH25953.1; GO; GO:0016020; C:membrane; IEA. GO; GO:0004888; F:transmembrane receptor activity; IEA.   | 2 2          | Stra             | usberg R.              |                 |               | -         | war /a   |                  |             |
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PRINTS; PR01537; INTELKN1RIF.
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Mammalia; Eutheria;
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GO; GO:0016020; C:membrane; IEA.
GO; GO:0004888; F:transmembrane recept InterPro; IPR007110; Ig-like.
InterPro; IPR004075; IL1 receptor1.
InterPro; IPR000157; TIR.
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Genome Res. 13:2265-2270(2003).
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Mammalia; Eutheria;
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Homo sapiens (Hu
                                                                            PROSITE; PS50835; IG LIKE; 1. PROSITE; PS50104; TIR; 1.
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SMART; SM00255; TIR; 1.
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Last sequence update)
Last annotation updat
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                                                      B3D4A5A60AF19D28
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  1876;
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                                                                                Penton-Rol G., Polentarutti N., Muzio M., Mantov.
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ da:
EMBL; AF113795; AAF26200.1; -.
MGD; MG1:1344402; A1256711.
GO; GO:0016021; C:integral to membrane; TAS.
InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR004075; IL1 receptor1.
InterPro; IPR004075; IL1 receptor1.
InterPro; IPR000157; TIR.
Pfam; PF01582; TIR, 1.
Pfam; PF01582; TIR, 1.
Pfam; PF01583; INTRLKNIRIF.
SMART; SM00409; IG; 1.
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Eukaryota; Metazoa; Ch
Mammalia; Eutheria; Ro
NCBI_TaxID=10090;
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01-OCT-2000 (TrEMBLrel. 15, L
01-MAR-2004 (TrEMBLrel. 26, L
7011/interleukin-1 receptor 8
Name=AIZ56711; Synonyms=TIR8;
                                                                                                                                                                                                                                                                                                                                                                                                               member of the IL-1
Proc. Natl. Acad. S
[2]
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PubMed=14993616; DOI=10.1073/pnas.0308680101;

Garlanda C., Riva F., Polentarutti N., Buracchi C., S.
De Bortoll M., Muzio M., Bergottini R., Scanziani E.,
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Bortcoli M., Muzz.
Je Bortcoli M., Muzz.
Je Bortcoli M., Muzz.
Hirsch E., Mantovani A.;
"Intestinal inflammation in mice detroit."
"Intestinal inflammation family.";
"Intestinal inflammation in mice detroit."
"Intertion in mice detroit."
"Intestinal inflammation in mice detroit."
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"Intestinal inflammation in mice detroit."
"Intertion in mice
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2; Mismatches 2;
DC4AB99A72356A13 CRC64;
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Best Local S
Matches 303
                                                     "Identification and c
of the interleukin-1
class of IL-1R-relate
J. Biol. Chem. 275:29
                                                                                                                                                                                                                                                                                                                                                                  IPL2 HUMAN STANDARD; PRT; 686 AA.

QNNF60; QDNZNO;
10-OCT-2003 (Rel. 42, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
7-linked interleukin-1 receptor accessory protein-like 2 precursor (ILIRAPL-2 related protein) (Interleukin-1 receptor 9) (IL-1R9) (II receptor accessory protein-like 2) (Three immunoglobulin domain-containing IL-1 receptor-related 1) (TIGIRR-1).

Name=ILIRAPL2; Synonyms=ILIR9;
                                                                                                            Born T.L.,
Sims J.E.;
                                                                                                                                                                                                      SEQUENCE FROM N.A., AND TISSUE SPECIFICITY.

TISSUE-Feetal brain;

TISSUE-Feetal brain;

MEDLINE-20487552; PubMed=11031108; DOI=10.1006/geno.2000.6328;

Sana T.R., Debets R., Timans J.C., Bazan J.F., Kastelein R.A.;

"Computational identification, cloning, and characterization c
"Computational interleukin-1 receptor-like gene encoded over an
IR9, a novel interleukin-1 receptor-like gene encoded over an
unusually large interval of human chromosome Xq22.2-q22.3.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HUMAN
              SEQUENCE FROM
TISSUE=Brain;
                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                        MEDLINE=20459050;
                                                                                                                                                               SEQUENCE FROM N.A.,
                                                                                                                                                     FISSUE=Liver;
                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
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                           FROM N.A.
                                                     ication and characterization of two members of a r
neerleukin-1 receptor (IL-IR) family. Delineation
IL-IR-related proteins based on signaling.";
Chem. 275:29946-29954(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GDLGVRGPVFGEPSAPPHTSGVSLGESRSSEVDVSDLGSRNYSARTDFYCLVSKDDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLIVVLSDAFLSRAWCSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AVLASILVILALILIAAILYVKCRINVILWYQDAYGEVEINDGKIYDAYVSYSDCPEDRKF
                                                                                                                                                                                              69:252-262 (2000) .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VNFILKPQLERRRGYKLFLEDRDLLPRADASADLLVNLSRCRRLIVVLSDAFLSREWCSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HFSLHEDFWVSANFSEI-VSSVLVLNLTNAEDYGTFTCSVWNVSSHSFTLWRAGPAGHVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MPGVCDRAPDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GDLGVRGPVFGEPPTPLQETRICIGESHGSEMDVSDLGSRNYSARTDFYCLVSEDDV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HYSLHEYSWVXANLSEVLVSSVLGVNVTSTEVYGAFTCSIQNISFSSFTLQRAGFTSHVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MAGVCDMAPNFLSPSEDQALGLALGREVALNCTAWVFSRPQCPQPSVQWLKDGLALGNGS
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                                                                                                                          Smith
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                                                                                                                                                                                                                                                                                                                                                               (Human)
 Lorenz
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                                                                                                                       PubMed=10882729;
D.E., Garka K.E.,
                                                                                                                                                                                                                                                                                                                                  Chordata;
Primates;
                                                                                                                                                                  AND
В.,
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72.7%;
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Hubel
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Pred. No. 1.7e-122;
32; Mismatches 67;
                                                                                                                                                                                                                                                                                                                                 Craniata; Vertebrata; Catarrhini; Hominidae;
₽.
                                                                                                                                                                  SPECIFICITY
                                                                                                                         DOI=10.1074/jbc.M004077200;
Renshaw B.R., Bertles J.S.,
 Strom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2
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                                                                                  a novel
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R.A.;
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new
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MIM; 30027;,
GG; GG:0016020; C:"...
R GG; GG:0004908; F:interleu...
DR GG; GO:0007417; P:central nervous .,
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
InterPro; IPR004075; IL1_receptor1.
TherPro; IPR004077; IL1_receptor1.
TherPro; IPR004077; ITR.
 PÉAM; PF00047; ig; 3.
PÉAM; PF01582; TIR; 1.
PRINTS; PR01539; INTRLEUKNIR2.
PRINTS; PR01537; INTRLKNIR1F.
SMART; SM00409; IG; 3.
SMART; SM00255; TIR; 1.
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Eur. J.
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TRANSMEM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 29-686 FROM N.A.

MEDLINE=20218565; PubMed=10757639; DOI=10.1038/sj.ejhg.5200415;
Jin H., Viswesvaraiah R., Gardner R.J., Roberts R.G.;
"Two novel members of the interleukin-1 receptor gene family, o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=21472256; PubMed=11587848; DOI=10.1016/S0378-1119(01)00659-X; Ferrante M.I., Ghiani M., Bulfone A., Franco B.; "ILIRAPL2 maps to Xq22 and is specifically expressed in the central
                                                                                                                                                                              Transmembrane.
                                                                                                                                                                                            Glycoprotein;
                                                                                                                                                                                                       PROSITE; PS50835; IG LIKE; PROSITE; PS50104; TIR; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gene 275:217-221(2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "IL1RAPL2 maps to Xq22 nervous system.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (FEB-2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ovary and in placenta.
SIMILARITY: Belongs to the interleukin-1 round in the similarity: Contains 3 immunoglobulin-like SIMILARITY: Contains 1 TIR domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBCELULAR LOCATION: Type I membrane protein.
TISSUE SPECIFICITY: Detected at low levels in fetal and brain, in particular in the frontal lobe, temporal lobe cerebellum. Detected at very low levels in skin, liver,
                                                                                                                                                                                                                                                                                                                                                                                                                            L; AF181285; AAF
P; Q63345; 1PKO.
ew; HGNC:5997; I)
; 300277; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AF212016; AAF61307.1; -..., AF284436; AAG21370.1; -..., AJ272208; CAB86868.1; -..., AJ290436; CAB89867.1; -..., AF181285; AAF59412.1; -...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in Xp22.3-Xp21.3 mental retardation." Hum. Genet. 8:87-94(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (IL1RAPL-2) with 61% identity to IL1RAPL maps to Xq22.2."; ed (FEB-2000) to the EMBL/GenBank/DDBJ databases.
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17
355
376
18
141
141
239
400
400
265
                                                                                                                                                                                          Immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                C:membrane; ISS.
F:interleukin-1 receptor
P:central nervous system
354
375
686
132
232
232
237
347
559
116
214
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                                       Potential.
Cytoplasmic (Potring-like C2-type 1
Ig-like C2-type 2
Ig-like C2-type 2
Ig-like C2-type 3
Ig-like C2-type 3
Potential.
Potential.
Potential.
                                                                                                                                                                                         domain;
                                                                                                                        protein-like 2.
Extracellular (Potential)
                                                                                                                                                   X-linked
                                                                                                                                                                                          Receptor;
                                                                                                                                                   interleukin-1
                                                                                                                                                                                                                                                                                                                                                                                   activity; TA:
development;
                                                                                             (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . receptor f
                                                                                                                                                                                          Repeat;
                                                                                                                                                                                                                                                                                                                                                                            TAS.
                                                                                                                                                   receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      family
                                                                                                                                                                                          Signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           domains.
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Best Local
Matches 11
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Q9ERS6; Q9ER66;
10-OCT-2003 (Re
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SEQUENCE
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Sims J.E.;
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10-OCT-2003 (Rel. 42, Last sequence update)
10-OCT-2004 (Rel. 44, Last annotation update)
N-1inked interleukin-1 receptor accessory protein-like 2
                                                                                                                                                                                                                                                                                                                                                                                                  MOUSE
nervous system.";
Gene 275:217-221(2001).
-!- SUBCELLULAR LOCATION:
                                     MEDLINE=21472256; PubMed=11587848; DOI=10.1016/S0378-1119(01)00659-X; Ferrante M.I., Ghiani M., Bulfone A., Franco B.; "ILIRAPL2 maps to Xq22 and is specifically expressed in the central
                                                                                                             "Identification and characterization of two members of a pof the interleukin-1 receptor (IL-1R) family. Delineation class of IL-1R-related proteins based on signaling."; C. Biol. Chem. 275:29946-29954(2000).
                                                                                                                                                                             SEQUENCE FROM N.A. (ISOFORM 1).
TISSUE=Brain, and Liver;
MEDLINE=20459050; PubMed=10882729;
Born T.L., Smith D.E., Garka K.E.,
                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                           NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                   Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                              Name=Illrapl2;
                                                                              rissue=Brain;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RGRVPEGRALDSEVDPDPEGDLGVRGPVFGEPSAPPHTSGVSLGESRSSEVDVSD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KRSIKLLSLIKWK-GSKSSKLNSKFWKHLVYEMPIK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SYS-----
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120
136
211
328
686
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      -PRCHVLDS----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AA,
                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
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                                                                                        (ISOFORM
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136
136
211
                                                                                                                                                                                                                                                          Rodentia;
                                                                                                                                                                                                                                                                     Chordata;
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Туре
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     -AEQGLFGELQPIPSIAMTSTSATL---VSSQADLPE
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                                                                                        2)
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Pred.
                                                                                                                                                                                                                                                          Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
 I membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               red. No. 1e-1
Mismatches
                                                                                        AND
                                                                                                                                                                             DOI=10.1074/jbc.M004077200;
Renshaw B.R., Bertles J.S.,
                                                                                        TISSUE
                                                                                                                                                                                                                                                                                                                                                                                      989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1e-13
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                                                                                        SPECIFICITY
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                                                                                                                                                       a novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         686;
                                                                                                                                                                                                                                                                                                                       precursor
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Query Match
Best Local
  Matches
                                                                                                                                                                                                                                                                                                           Pfam; PF00047; ig; 3.
Pfam; PF01582; TIR; 1.
PRINTS; PR01537; INTRLKNIR1P.
PRINTS; PR01537; INTRLKNIR1P.
SMART; SM00409; IG; 3.
SMART; SM00255; TIR; 1.
PROSITE; PS50835; IG_LIKE; 3.
PROSITE; PS50835; IG_LIKE; 3.
                                                                                               CARBOHYD
CARBOHYD
                                                                                                                             CARBOHYD
CARBOHYD
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                                                                                                                                                                        DOMAIN
DISULFID
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DOMAIN
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                                           SEQUENCE
                                                                 VARSPLIC
                                                                                     VARSPLIC
                                                                                                                    CARBOHYD
                                                                                                                                                                                                                            DOMAIN
                                                                                                                                                                                                                                         TRANSMEM
                                                                                                                                                                                                                                                  DOMAIN
                                                                                                                                                                                                                                                                                   Repeat; Signal
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR004075; IIl receptor1.
InterPro; IPR004077; IIl receptorIIp.
InterPro; IPR000157; TIR.
                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       MGD; MGI:1913106; Illrapl2.
GO; GO:0016020; C:membrane; ISS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AJ277831; CAC
HSSP; Q63345; 1PKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; AF284437; AAG21371.1; -. EMBL; AJ277831; CAC10559.1; -.
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                                                                                                                                                                                                                                                                                                    Alternative splicing; Glycoprotein; Immunoglobulin domain; Receptor;
           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IsoId-Q9ERS6-2; Sequence-VSP_008056, VSP_008057;
Note-may be due to an intron retention;
TISSUE SPECIFICITY: Detected in fetal brain after day 12.5, in particular in parts of the diencephalon and in the basal plate o the spinal cord. In postnatal brain detected in cerebral cortex, olfactory bulb, in the CA1 region of the hippocampus and in Purkinje cells of the Xth cerebellar lobule.

SIMILARITY: Belongs to the interleukin-1 receptor family.
SIMILARITY: Contains 3 immunoglobulin-like C2-type domains.

SIMILARITY: Contains 1 TIR domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Name=2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ALTERNATIVE PRODUCTS
Event #Alternative sp.
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 186
           Similarity
                                           686 AA;
 Conservative
                                                                                    355
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                                                                                                                                                                                                                                                                                            Transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Illrapl2.
                                                                                    989
                                           78797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                 16
        12.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence=Displayed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    splicing; Named isoforms=2
                                            ¥
 65,
                                       N-linked (GlCNAC...) (Pot

DLIYK -> GILPS (in isoform

/FIId=VSP_008055.

Missing (In isoform 2).

/FIId=VSP_008057.
Score 261; DB 1;
Pred. No. 3.7e-13;
5; Mismatches 126
                                                                                                                                                           Potential.
                                                                                                                                                                                  Ig-like
Ig-like
Ig-like
TIR.
                                                                                                                                                                                                                            Potential.
Cytoplasmic (Potential).
                                                                                                                                                                                                                                                           X-linked interleukin-1 receptor protein-like 2
                                                                                                                                                                                                                                                 Extracellular (Potential).
                                                                                                                                                                                          e C2-type 1.
e C2-type 2.
e C2-type 3.
 126;
                                                                                  (in isoform
                    Length 686;
 Indels
                                                                                  (Potential).
(Potential)
(Potential).
(Potential).
(Potential).
(Potential).
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 50;
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                                                                                                                                                                                                                                                                       accessory
Gaps
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IPL1_MC
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DRAPDFLSPSEDQ--VLRPALGSSVALNCTAWV-VSGPHCSLPSVQWLK-DGLPLGIGGH

61

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EMBL; AL844900; -; NOT ANNOTATED CDS.
EMBL; AL672059; -; NOT ANNOTATED CDS.
EMBL; AK081272; -; NOT ANNOTATED CDS.
InterPro; IPR007110; IG-like.
InterPro; IPR003598; IG c2.
InterPro; IPR004075; III receptor1.
InterPro; IPR000157; TIR.
                              Pfam; PF00047; ig; 2.
Pfam; PF01582; TIR; 1.
PRINTS; PR01537; INTRLKNIRIF.
PRINTS; SM00408; IGc2; 1.
SMART; SM00255; TIR; 1.
PROSITE; PS50835; IG LIKE; 3.
PROSITE; PS50104; TIR; 1.
                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and
                                                                                                                                                                                                                                                                                                  entities requires a license agreement (s or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
               Glycoprotein; Immunoglobulin domain; Receptor; Repeat; Signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-OCT-2003 (Rel. 42, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
05-UTL-2004 (Rel. 44, Last annotation update)
X-linked interleukin-1 receptor accessory pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished observations (AUG-2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CONCEPTUAL TRANSLATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=10090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=Illrapl1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IPL1_MOUSE P59823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IL1RAPL-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUBCELLULAR LOCATION: Type I membrane protein.

SIMILARITY: Belongs to the interleukin-1 receptor family.

SIMILARITY: Contains 3 immunoglobulin-like C2-type domain

SIMILARITY: Contains 1 TIR domain.

CAUTION: This is a conceptual translation using ESTs and
                                                                                                                                                                                                                                                                                                                                                                                                                                               sequences, in analogy to ortholog sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VESLKHNIKLLSLIKWKGPKSSKLNSKFWKHLVYEMPIK 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C----RRLIVVLS-DAFLSRAWCSHSFREGLCRLL---ELTRRPIFITFEGQRRDPAHPA
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                                                                                                                                                    ; Ig_c2.
; ILl_receptor1.
; TIR.
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                                                                                                                                                                                                                                                                                                                                          and
                                                                                                                                                                                                                                                                                                                                                                                             EMBL outstation
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Best Local S
Matches 95
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DOMAIN
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Q9U53;
10-OCT-2003 (Rel. 42, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
10-JUL-2004 (Rel. 44, Last annotation update)
X-linked interleukin-1 receptor accessory protein-like 1 precursor (ILIRAPL-1) (Oligophrenin-4) (Three immunoglobulin domain-containing IL-1 receptor-related 2) (TIGIRR-2).

Name=ILIRAPLL; Synonyms=OPHN4;
                                                                                                                                                                                                                                                                                                   LT 8
SEQUENCE FROM N.A.,
SPLICING.
TISSUE=Fetal brain;
                                                                                      Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DOMAIN
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                                                                                                                         Homo sapiens
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or send a
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Sims J.E.
   MIM; 300426; -.
GO; GO:0016020; C:membrane; ISS.
GO; GO:0004872; F:receptor activity; TAS.
GO; GO:0007611; P:learning and/or memory;
InterPro; IPRO07110; Ig-like.
                                                                                                                               EMBL; AJ243874; CAB56046.1; --
EMBL; AF181284; AAF59411.1; --
EMBL; AF284435; AAG21369.1; --
EMBL; AB102650; BAC81119.1; --
HSSP; P11362; 1EVT.
                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN the European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by ancentities requires a license agreement (See http://www.isb-entities requires a license agreement (See
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TISSUE=Brain, and Testis;
MEDLINE=20459550; PubMed=10882729;
MEDLINE=20459561; PubMed=10882729;
MEDLINE=20459505; PubMed=10882729;
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MEDLLINE=20218565; PubMed=10757639; DOI=10.1038/sj.ejhg.5200415;
Jin H., Gardner R.J., Viswesvarsiah R., Muntoni F., Roberts R.G

"Two novel members of the interleukin-1 receptor gene family, of
deleted in Xp22.3-Xp21.3 mental retardation.";

Eur. J. Hum. Genet. 8:87-94(2000).
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placenta, colon and fetal liver.

plschase: Defects in IIIRAPLI are a cause of nonspecific x-linke mental retardation (MRX34) [MIM:300426]. Several forms of X-lin mental retardation have been described; they are classified as non-specific if there are no other characteristic clinical
                                                                                                                                                                                                                                                                                                                                                                     symptoms.

SIMILARITY: Belongs to the interleukin-1 receptor family.

SIMILARITY: Contains 3 immunoglobulin-like C2-type domain

SIMILARITY: Contains 1 TIR domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . Biol. Evol. 20:1281-1289(2003).
SUBCELLULAR LOCATION: Type I membrane
ALTERNATIVE PRODUCTS:
                                                                                 300206; -.
300426; -.
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Comment=A number of isoforms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tification and characterization of two members of a ne interleukin-1 receptor (IL-1R) family. Delineation of IL-1R-related proteins based on signaling."; ol. Chem. 275:29946-29954(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IsoId=Q9NZN1-1;
                                                                                                                   HGNC:5996;
                                                                                                                                                                                                                                       an email to license@isb-sib.ch).
                                                                                                                   IL1RAPL1.
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Paabo S.;
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Renshaw B.R., Bertles
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AC P60029;
DT 29-MAR-2004 (Rel. 43, Created)
DT 29-MAR-2004 (Rel. 44, Last sequence update)
DT 29-MAR-2004 (Rel. 44, Last annotation update)
DE X-linked interleukin-1 receptor accessory protein-like (ILLRAPL-1) (Ollgophrenin-4).
DE (ILLRAPL-1) (Ollgophrenin-4).
GN Name=ILLRAPL1; Synonyms=OPHN4;
OS Pan troglodytes (Chimpanzee).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut.
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Par
NCBI TaxID=9598;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DKPPKLLYPMESKLTIQETQLGDSANLTCRAFFGYSGDVS-PLIYWMK-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            YVSYS-----DCPEDRKFVNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNL
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Cytoplasmic (Potential).
Ig-like C2-type 1.
Ig-like C2-type 2.
Ig-like C2-type 3.
Ig-like C2-type 3.
TIR.
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Pred. No. 9.1e.
4; Mismatches
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                                                            Euteleostomi;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS50835; IG_LIKE; PROSITE; PS50104; TIR; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00047; ig; 2. Pfam; PF01582; TIR; 1
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InterPro; IPR007110; Ig-like.
InterPro; IPR000157; TIR.
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Mol. Biol. Evo
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MEDLINE=22763540; PubMed=12777533; DOI=10.1093/molbev/msg134;
Kitano T., Schwarz C., Nickel B., Paabo S.;
"Gene diversity patterns at 10 X-chromosomal loci in humans a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fransmembrane.
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SUBCELLULAR LOCATION: Type I membrane protein.
SIMILARITY: Belongs to the interleukin-1 recep
SIMILARITY: Contains 3 immunoglobulin-like C2-
SIMILARITY: Contains 1 TIR domain.
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DQSKRLIIVMTPNYVVRRGWSIFELETRLRNMLVTGEIKVILIECSELRGIMNYQEVEAL
                                                                                                                                                        YVSYS-----
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                                               SRCRRLIVVLSDAF-LSRAWCSHSFREGICRLLELTR-RPIFITFEGORRDPAHPALRIL
                                                                                                YLSYTKVDPDQWNQETGEEERFALEILPDMLEKHYGYKLFIPDRDLIPTGTYIEDVARCV
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Extracellular (Potential)
Potential.
Cytoplasmic (Potential).
Ig-like C2-type 1.
Ig-like C2-type 2.
Ig-like C2-type 3.
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N-linked (
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Pred. No. 9.
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X-linked interleukin-1 receptor
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tions on its
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InterPro; IPR003598; I
InterPro; IPR004075; I
InterPro; IPR000157; I
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P59824;
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05-JUL-2004
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                                                                                                                       DOMAIN
DOMAIN
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SMART; SM00255; TIR; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                        entities requires a license agreement (S or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                     Transmembrane.
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                                                                                                             DOMAIN
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PF01582; TIR;
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    42, Last sequence update)
    44, Last annotation update)
    kin-1 receptor accessory protein-like 1 precursor

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; IL1_receptor1.
; TIR.
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   <u>.</u>
                                                                                                 X-linked interleukin-1 receptor ac protein-like 1.
Extracellular (Potential).
Potential.
Cytoplasmic (Potential).
Ig-like C2-type 1.
Ig-like C2-type 3.
Ig-like C2-type 3.
IR.
         Potential.
Potential.
Potential.
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Sciurognathi; Muridae; Murinae; Rattus
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         (Glenae...
   CRC64;
         (Potential).
(Potential).
(Potential).
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(Potential).
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MBL outstation -
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RESULT 11
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Best Local S
Matches 93
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Q7YQL9;
05-JUL-2004
SMART; SM00408; IGC2; 1.
SMART; SM00255; TIR; 1.
PROSITE; PS50835; IG LIK
PROSITE; PS50104; TIR; 1
                                                      Pfam;
Pfam;
                                                                                                                                                        use by non-profit institutions as long modified and this statement is not removed entities requires a license agreement (See
                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Elthe European Bioinformatics Institute. There are no rest
                                                                                                                                                                                                                                                                                                                                                                                                                 Pongo pygmaeus (Orangutan).
Bukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUL-2004 (Rel. 44, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
X-linked interleukin-1 receptor accessory protein-like 1
                                                                                                                                                                                                                                                     -i- SUBCELULAR LOCATION: Type I membrane prote-
-i- SIMILARITY: Belongs to the interleukin-1 re-
-i- SIMILARITY: Contains 3 immunoglobulin-like-
-i- SIMILARITY: Contains 1 TIR domain.
                                                                                                                                                                                                                                                                                                            chimpanzees.";
Mol. Biol. Evo
                                                                                                                                                                                                                                                                                                                                     MEDLINE=22763540; PubMed=12777533; DOI=10.10s
Kitano T., Schwarz C., Nickel B., Paabo S.;
"Gene diversity patterns at 10 X-chromosomal
                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=9600;
                                                                                             InterPro;
                                                                                                                      EMBL; AB102652; BAC81121.1; -.
                                                                                                                                                or send
                                                                                                                                                                                                                                                                                                                                   "Gene diversity patterns
                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Name=IL1RAPL1;
                                                                                InterPro;
                                                                                                         InterPro;
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                                                    PF00047; ig; 2.
PF01582; TIR; 1.
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                                                                                                                                                an email to license@isb-sib.ch).
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                                                                               IPR007110; Ig-like.
IPR003598; Ig_c2.
IPR000157; TIR.
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1; Synonyms=OPHN4;
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26.0%;
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Pred.
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No. 9.1
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                                                                                                                                                                                                                                                                   receptor family.
ke C2-type domain
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RESULT 12
IR18_MOUSE
ID IR18 MOUSE
AC Q61058;
DT 28-FEB-2003 (Re
TT 28-FEB-2003 (Re
T 05-UL-2004 (Re)
Interleukin-18 re
(IL-1Rrp).
Name=Il8-1;
Mus muscul:
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                                                                                                                                                         Mus musculus (Mouse)
Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10090;
SEQUENCE FROM N.A., AND VARIANT ALA-317 DEL.

MEDLINE=96223957; PubMed=8626725; DOI=10.1074/jbc.271.8.396

Parnet P., Garka K.E., Bonnert T.P., Dower S.K., Sims J.E.;

"IL-1Rrp is a novel receptor-like molecule similar to the tinterloukin-1 receptor and its homologues T1/ST2 and IL-1R J. Biol. Chem. 271:3967-3970(1996).
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el. 44, Last annotation update)
receptor 1 precursor (IL1 rece
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Rodentia;
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protein-like 1.
Extracellular (Potential)
Cytoplasmic (Potential).
Ig-like 1.
Ig-like 2.
Ig-like 3.
Ig-like 4.
Ig-like
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                                                                                                                                                                                    Craniata; Vertebrata;
Sciurognathi; Muridae;
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Mismatches 149
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRINTS; PR01537; INTRLKN1R1F
SMART; SM00409; IG; 2.
SMART; SM00255; IIR; 1.
PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS50104; TIR; 1.
                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; U43673; AAC52437.
HSSP; Q15399; 1FYV.
MGD; MGI:105383; Il18r1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FUNCTION: Receptor for interleukin 18 (IL-18). agonist leads to the activation of NF-kappa-B. SUBCELLUAR LOCATION: Type I membrane protein. MISCELLANEOUS: Does not bind interleukin 1 alp. interleukin 1 beta (IL-18).

SIMILARITY: Belongs to the interleukin-1 recep. SIMILARITY: Contains 3 immunoglobulin-like C2-SIMILARITY: Contains 1 TIR domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBI outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way field and this statement is not removed. Usage by and for commercial
310
                                  109
                                                                                                                                     212
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                                                                                                                                                                                                     l Similarity 27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           an email to license@isb-sib.ch).
                                                                                             DGLPLGIGGHYSLHEYSWVKANLSEVLVSSVLGVNVTSTEVYGAFTCSIQN---ISFSSF
VLVRKEIPDIPGHVFTGGVTVLVLASVAAVCIVILCVIYKVDLVLFYRRIAERDETLTDG
                              TLQR--
                                                                                                                                     PAILGPKCEKV-GVELGKDVELNCSASLNKDDLFYWSIRKEDSSDPNVQEDRKETTTWIS
                                                                                                                                                                     PDFLSPSEDQVLRPALGSSVALNCTA-----
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                                                                                                                                                                                                                                                                          Immunoglobulin
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                                                                                                                                                                                                                                                                                              ; Ig.
; Ig-like.
; IL1_receptor1.
; TIR.
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                                                                                                                                                                                                                                                                                      By similarity.
By similarity.
N-linked (GlcNAc.
                                                                                                                                                                                                     Score 254; DB
Pred. No. 1e-1
52; Mismatches
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Extracellular (E
Extracellular (E
Potential.
Cytoplasmic (Pot
Ig-like C2-type
Ig-like C2-type
Ig-like C2-type
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Ig-like C2-type
                                                                  KLHASKILRFQ
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C2-type
C2-type
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (See
                                                                                                                                                                                                                         1e-12
                                                                ---KITENYLNVLYNCTVANEEAIDTKSF
                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Potential)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Potential).
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                                                                                                                                                                     - WVVSGPHCSLPSVQ---
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EMBL; AY182233; AAO24704.1; -.
EMBL; AY182234; AAO24705.1; -.
InterPro; IPR003599; IG.
InterPro; IPR007110; Ig-like.
InterPro; IPR004075; IL1 recepto
InterPro; IPR004074; IL1 recepto
InterPro; IPR004074; IT.
Pfam; PF00047; ig; 2.
Pfam; PF001582; TIR; 1.
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10-OCT-2003
                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is prod between the Swiss Institute of Bioinformatics the European Bioinformatics Institute. There use by non-profit institutions as long as modified and this statement is not removed. The modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=22419343; PubMed=12530978; DOI=10.1016/S1074-7613(02)(Smith D.E., Hanna R., Friend D., Moore H., Chen H., Farese A.N MacVittie T.J., Virca G.D., Sims J. Sims J. Watte F.J., Virca G.D., Sims J. Sims J. Wittie T.J., Virca G.D., Sims J. Sims
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; V
Mammalia; Eutheria; Primates; Catarrhini;
Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-OCT-2003 (Rel. 42, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
05-UIL-2004 (Rel. 44, Last annotation update)
Interleukin-1 receptor accessory protein prec
                                                                                                                                                                                                                                                         entities requires a license agreement or send an email to license@isb-sib.cl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A., FUNCTION, CHARACTERIZATION OF ISOFORM 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               accessory protein) (IL-1RAcP)
Name=IL1RAP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=9544;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ILAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                       IsoId=P59822-1; Sequence=Displayed;
Name=2; Synonyms=Soluble II-1R ACP;
IsoId=P59822-2; Sequence=Not described;
SIMILARITY: Belongs to the interleukin-1 re
SIMILARITY: Contains 3 immunoglobulin-like
SIMILARITY: Contains 1 TIR domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: Mediates interleukin-1-dependent activation of NF-kappa-
B. Isoform 1 is part of the membrane-bound form of the IL-1
receptor. Signaling involves formation of a ternary complex
containing ILIR1, TOLLIP, MYD88, and IRAK1 or IRAK2. Isoform 2
modulates the response to interleukins by associating with soluble
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ALTERNATIVE PRODUCTS:
Event=Alternative spl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBCELLULAR LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Event=Alternative splicing; Named ison Name=1; Synonyms=Membrane-bound IL-IR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           similarity)
                                                                                                                                                                                                                                                                                                                                                           SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IL1R1 and enhancing interleukin-binding
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                                                                                                                                                                                                                                                            email to license@isb-sib.ch).
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                                                 ig-like.
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irr.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DOI=10.1016/S1074-7613(02)00514-9; oore H., Chen H., Farese A.M.,
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                                                                                                                                                                                                                                                                              (See http://www.
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i; Cercopithecidae;
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e domains.
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RESULT

OXCOOR DESTRUCTION

Interleukin-18 (IL-1Rrp)

Eukaryota; Metazoa; Mammalia; Eutheria;

Chordata; Primates;

Craniata; V Catarrhini;

Vertebrata; Euteleostomi; i; Hominidae; Homo.

\_TaxID=9606

Homo sapiens

(Human)

Name=IL18R1; Synonyme=IL1RRP;

28-FEB-2003 28-FEB-2003 05-JUL-2004

(Rel. 41, Created)
(Rel. 41, Last sequence update)
(Rel. 44, Last annotation updat
-18 receptor 1 precursor (IL1 re

update)

receptor-related

protein)

IR18\_HUMAN Q13478; LT 14 \_HUMAN

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRINTS; PRO1536; INTRLKNIR12F, PRINTS; PRO1537; INTRLKNIR1F, SMART; SM00409; IG; 2, SMART; SM00255; TIR; 1.
                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                         Repeat; Signal;
SIGNAL 1
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                                  474
                                                                     416
                                                                                                                                         302
                                                                                                                                                                            243
 527
                 289
                                                    236
                                                                                      176
                                                                                                                                                         64
                                                                                                                                                                                            9
                                                                                                                                                                                                                     Similarity
                 R-PGSVTPSSDFWKEVQLALPRKVRYRPVEGDPQ
                                                                                                                                          ISH----
                                                                                                     KGEKSKYPQGRFWKQLQVAMPVKKSPRRSSSDEQ
                                 -----LQGTQALLELKAGLENMASQGNINVILVQYKAVKETKVKELKRAKTVLTVIKW
                                                   AWCSHSFREGLCRLLELTRRPIFITFEG-----QRRDPAHPALRLLRQHRHLVTLLLW
                                                                    EEEEFVLLTLRGVLENEFGYKLCIFDRDSLPGGIVTDETLSFIQKSRRLLVVLSPNYV--
                                                                                     EDRKFVNFILKPOLERRRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLIVVLSDAFLSR
                                                                                                                                                        LHEYSWVKANLSEVLVSSVLGV-NVTSTEVYGAFTC---SIQNISFSSFTLQRAGPTSHV
                                                                                                                                                                           PVIHSPNDHVVYEKEPGEELLIPCTVY-PSFLMDSRNEVWWTIDGKKPDDIPIDVTINES
                                                                                                                                                                                            PDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDG-----LPLGIGGHYS
                                                                                                                                                                                                                                                                                                                                                                                                                                           splicing; Glycoprotein;
                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Transmembrane.
                                                                                                                                         -SRTEDETRTQILSIKKVTSEDLKRSYVCHARSAKGEVAKAATVKQKVPAPRY
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367
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2299
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                                                                                                                                                                                                              63;
                                                                                                                                                                                                                                                                                                                                                     Cytoplasmic (Potential).
Ig-like C2-type 1.
Ig-like C2-type 2.
Ig-like C2-type 3.
Ig-like C2-type 3.
TIR.
                                                                                                                                                                                                             Score 240.5;
Pred. No. 1.6e
53; Mismatches
                                                                                                                                                                                                                                                                N-linked
N-linked
N-linked
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                                                                                                                                                                                                                                                         N-linked
                                                                                                                                                                                                                                                                                                                   Potential
Potential
                                                                                                                                                                                                                                                                                                                                     Potential Potential
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                                                                                                                                                                                                                    240.5; DB 1;
No. 1.6e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Immunoglobulin
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                 321
                                                                                                                                                                                                                                                CRC64;
                                                                                                                                                                                                                             Length
                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                            domain;
                                                                                                                                                                                                                                                               (Potential).
(Potential).
(Potential).
(Potential).
(Potential).
(Potential).
                                                                                                                                                                                                                                                         (Potential)
                                                                                                                                                                                                                               570;
                                                                                                                                                                                                              37;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Receptor;
                                                                                                                                                                                                              Gaps
                                                                                                        415
                                                                                                                                          356
                                                                                                                                                                             301
                                   526
                                                    288
                                                                     473
                                                                                       235
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GO; GO:0005886; C:plasma membrane; TAS.
GO; GO:0004872; F:receptor activity; TAS.
GO; GO:0006955; F:immune response; TAS.
GO; GO:0007165; P:signal transduction; TAS.
InterPro; IPR003599; Ig.
InterPro; IPR003110; Ig-like.
InterPro; IPR004075; IL1_receptor1.
InterPro; IPR004074; IL1_receptor1/II.
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                                                                                                                                                                                                                                                                                                                           PRINTS; PRO1536; INTRLKN1R12F
PRINTS; PRO1537; INTRLKN1R1F.
SMART; SM00409; IG; 2.
SMART; SM00255; TIR; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; U43672; AAC50390.1;
HSSP; Q15399; 1FYV.
Genew; HGNC:5988; IL18R1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 19-29; 55-58; 59-71; 211-221; 222-231; 269-275; 276
319-315 AND 524-535, AND CHARACTERIZATION.
MEDLINE=97467370; PubMed=9325300; DOI=10.1074/jbc.272.41.25737;
Torigoe K., Ushio S., Okura T., Kobayashi S., Taniai M., Kunika Murakami T., Sanou O., Kojima H., Fujii M., Ohta T., Ikeda M.,
                                                                                                                                                                                                                                                                                     PROSITE; PS50835; IG_LIKE; 1.
PROSITE; PS50104; TIR; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Torigoe K., Ushio S., Okura
Murakami T., Sanou O., Kojir
Ikegami H., Kurimoto M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         [1]
SEQUENCE FROM N.A., AND VARIANT ALA-317 DEL.
MEDLINE=96223957; PubMed=8626725; DOI=10.1074/jbc.271.8.3967;
Parnet P., Garka K.E., Bonnert T.P., Dower S.K., Sims J.E.;
"IL-IRTP is a novel receptor-like molecule similar to the type I interleukin-1 receptor and its homologues T1/ST2 and IL-1R ACP.";
J. Biol. Chem. 271:3967-3970(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J. Biol. Chem. 272:25737-25742 (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Purification and characterization of the human interleukin-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FUNCTION: Receptor for interleukin 18 (IL-18). Binding to the agonist leads to the activation of Mr-kappa-B.

SUBCELLULAR LOCATION: Type I membrane protein.

TISSUE SPECIFICITY: Expressed in lung, leukocytes, spleen, live thymus, prostate, small intestine, colon, placenta, and heart, is absent from brain, skeletal muscle, pancreas, and kidney. H. is expression in Hodgkin's disease cell lines.

Level of expression in Hodgkin's disease cell lines.

MISCELLANEOUS: Does not bind interleukin 1 alpha (IL-1A) or interleukin 1 beta (IL-1B).

SIMILARITY: Belongs to the interleukin-1 receptor family.

SIMILARITY: Contains 3 immunoglobulin-like C2-type domains.
                                                                                                                                                                                                                                                  protein sequencing; Glycoprotein; Immunoglobulin
rphism; Receptor; Repeat; Signal; Transmembrane.
       18
Extracellular (Potential).
Potential.
Cytoplasmic (Potential).
Ig-like C2-type 1.
Ig-like C2-type 2.
Ig-like C2-type 3.
Ig-like C2-type 3.
IR.
By similarity.
By similarity.
N-linked (Glenac. . .) (Potential).
                                                                                                                                                                                                               Interleukin-18
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                                                                                                                                                                                           (Potential).
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                         (Potential)
                                                                                                                                                                                                                                                                      domain;
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Matches 99
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Q9NPH3; O14915; Q86WJ7;

10-OCT-2003 (Rel. 42, Last sequence updar of 05-UUL-2004 (Rel. 44, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Rel. 45, Last annotation updar of 10-CT-2004 (Re
                 PHORBOL ESTERS.
TISSUE-Liver,
MEDLINE-20261666; PubMed-10799889;
                                                                                                                                                                     Saito T.,
Submitted
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VARIANT
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                                                                                                                                                                                                                         FISSUE=Brain;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          accessory protein) (IL-1RAcP).
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                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                          Huang J., Gao X., Li S., Cao Z., Recruitment of IRAK to the interleukin 1 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=98058729; PubMed=9371760; DOI=10.1073/pnas.94.24.12829;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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                                                                                                               FROM N.A.
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                                                                                                                                                                   Seki N.;
(AUG-1997)
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                                                                                                                                                                                                                                                                                                 1 receptor accessory protein.";
Acad. Sci. U.S.A. 94:12829-12832(1997)
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Pred. No. 8.5e-11;
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7173DB9C7EA71D32
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Jensen L.E., Muzio M., Mantovani

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Whitehead

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Richards R.L., Feingold E.A., Grouse L.H., Derge J.G.,
A Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
A Diatchenko L., Warusina K., Farmer A.A., Rubin G.M., Hong L.,
A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
A Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
A Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
A Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
A Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
A Mhiting M., Madan J.W., Green E.D., Dickson M.C.,
B Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
B Blakesley R.W., Touchman J.W., Schmutz J., Myers R.M.,
A Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
C Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
C Grimwood J., Schmutz J., Myers R.M.,

"Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences.",

"C C. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
                                                                                                                                                                                                                                 MEDLINE=22419343; PubMed=12530978; DOI=10.1016/S1074-Smith D.E., Hanna R., Friend D., Moore H., Chen H., F MacVittie T.J., Virca G.D. B.;
MacVittie T.J., Virca G.D. B.;
"The soluble form of IL-1 receptor accessory protein ability of soluble type II IL-1 receptor to inhibit I Immunity 18:87-96 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                INTERACTION WITH IRAK2.
INTERACTION WITH IRAK2.
MEDLINE=22546438; PubMed=12659850; DOI=10.1016/S0006-291X(03)00385-1;
Roch J.A., Yoshida Y., Koyama Y., Wara-Aswapati N., Peng H., Unlu S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 118-179 FROM N.A. (ISOFORM 1).

MEDLINE=98140136; PubMed=9479509; DOI=10.1006/geno.1997.5113;

Dale M., Hammond D.W., Cox A., Nicklin M.J.H.;

"The human gene encoding the interleukin-1 receptor accessory protein

(ILIRAP) maps to chromosome 3q28 by fluorescence in situ hybridization
and radiation hybrid mapping.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein mRNAs is differentially apoptosis.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "IL-1 signaling cascade in liver cells and the involvement soluble form of the IL-1 receptor accessory protein.";
J. Immunol. 164:5277-5286(2000).
                                                                                                                                                                                                                                                                                                                                                                                      "Characterization of a cascade the IL-1 receptor."; Biochem. Biophys. Res. Commun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genomics 47:325-326(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=22388257;
                                                                                                                                                                                                                                                                                                                                                      TISSUE SPECIFICITY.
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                                                    containing IIIR1, TOLLIP, MYD88, and IRAK1 or IRAK2. Isoform 2 modulates the response to interleukins by associating with soluble IIIR1 and enhancing interleukin-binding to the decoy receptor. SUBCELLULAR LOCATION: Type I membrane protein (isoform 1). Isoform 2, isoform 3 and isoform 4 are secreted.
                                                                                                                                                    FUNCTION: Mediates interleukin-1-dependent activation of NF-kappa-
B. Isoform 1 is part of the membrane-bound form of the IL-1
receptor. Signaling involves formation of a ternary complex
containing ILLR1, TOLLIP, MYD88, and IRAK1 or IRAK2. Isoform 2
                    Event=Alternative splicing; Named isoform Name=1; Synonyms=Membrane-bound IL-1RACP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Signal. 15:793-802(2003).
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    Sequence=Displayed;
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                                        Named isoforms=4;
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entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                               use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                       the European Bioinformatics Institute.
                                                                                                                                                                                                                                  isoform 1 and induction of isoform 2.
SIMILARITY: Belongs to the interleukin-1 re
SIMILARITY: Contains 3 immunoglobulin-like
SIMILARITY: Contains 1 TIR domain.
                                                                                                                                                                                                                                                                                                                                                                                                        IsoId=Q9NPH3-2; Sequence=VSP_008050, \
Name=3; Synonyms=Soluble IL-1RAcP-beta, \
IsoId=Q9NPH3-3; Sequence=VSP_008052; \
...
                                                                                                                                                                                                                                                                                                             INDUCTION: Phorbol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Name=2; Synonyms=Soluble IL-1RAcP,
                                                                                                                                                                         SWISS-PROT entry is copyright. It is produced sen the Swiss Institute of Bioinformatics and
AF029213; AAB84059.1;
AB006537; BAA25421.1;
AF167343; AAF71687.1;
                                                                                                                                                                                                                                                                                                                                                     IsoId=Q9NPH3-4; S
SSUE SPECIFICITY:
                                                                                                                                                                                                                                                                                        induction of isoform
                                                                                                                                                                                                                                                                                                                                                   Sequence=VSP_008053;
Y: Detected in liver,
                                                                                              (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                causes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIL-1RACP;
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lke C2-type
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InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR007110; II\_receptor1.
InterPro; IPR004075; II\_receptor1/II.
InterPro; IPR004074; II\_receptor1/II.
InterPro; IPR004074; II\_receptor1/II.
InterPro; IPR004074; II\_receptor1/II.
Pfam; PF00047; ig; 2.
Pfam; PF00047; ig; 2.
Pfam; PF001502; TIR; 1.
PRINTS; PR01536; INTRLKNIR12F.
PRINTS; PR01537; INTRLKNIR1F.
SMART; SM00409; IO; 3.
SMART; SM00409; IO; 3.
SMART; SM00255; TIR; 1. PROSITE; PS50835; IG\_LIKE; 2.
PROSITE; PS50104; TIR; 1.
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Ig-like C2-type 2
Ig-like C2-type 2
Ig-like C2-type 3
Ig-like C2-type 3
Ig-like C3-type 3 . . . . . . . . . Interleukin-1 Potential Immunoglobulin domain; (Potential). (Potential).

Receptor;

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                                                                                       ---LQGTQALLELKAGLENWASRGNINVILVQYKAVKETKVKELKRAKTVLTVIKWKGEK 530
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                                                                                                                                     SISHSRTEDETRTQILSIKKVTSEDLKRSYVCHARSAKGEVAKAAKVKQKVPAPRYTVEL 360
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N-linked (GlcNAC...) (Potential).
N-linked (GlcNAC...) (Potential).
VPAPRY -> GNRCGQ (in isoform 2).
/FTId=VSP_008050.
Missing (In isoform 2).
/FTId=VSP_008051
ISHRTGDETRTQILSIKKYTSEDLKRSYVCHARSAKGEVA KAAKVKQKVAPARYTYELACGFGATYLLVILIVVYHVYML EMVLFYRAHFGTDETILDGKEYDIYVSYARNAEEEBFVLLT LRGVLENEFGYKLCIFDRDSLPGGIVTDETILSFUSSRTLL VVLSNWYLOGTQALLELKAGLENMASRGNINVILVQKAV KETKVKELKRAKTYLTYIKWKGEKSKKYPQGRRWKQLGVAMP VKKSPRRSSSDEQGLSYSSLKNV -> ASSKIHSGTGLWFW
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Pred. No. 1.6e-10;
0; Mismatches 150;
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